# **EXHIBIT 1**

# Redacted Version of Document Sought to be Sealed

#### Message

From: Parisa Tabriz [parisa@google.com]

**Sent**: 2/11/2015 6:57:06 PM

To: Chris Palmer [palmer@google.com]
CC: Adrienne Porter Felt [felt@google.com]

Subject: Re: Incognito-fest 2015

On Wed, Feb 11, 2015 at 10:52 AM, Chris Palmer < palmer@google.com > wrote: On Wed, Feb 11, 2015 at 4:41 AM, Adrienne Porter Felt < felt@google.com > wrote:

- > Second question. Is Incognito something our team wants to take on? (Palmer,
- > in Q2 or Q3?) It would take attention and focus away from HTTPS but OTOH it
- > is also something I know we all care about. Or should we focus on trying to
- > poke the privacy team into action?
- 1. Sure, I can give a brief briefing. What is the best format?Document, slides, in-person chat, a CL that has +0 lines and -15000?:)
- 2a. I'm not sure we should take it on. It's radioactive: In its current form, it is effectively a lie; in its fixed form (rebranded, clarified) it will be a huge negative press cycle like Master Password was (most people drunkenly screeching; Kevin Poulsen being the lone sane voice); in its genericized form (

) people will

think we killed it unceremoniously and then it will be 100% screeching.

I'd prefer our team does not take this on and Chrome Privacy steps up.

2b. If we don't take it on, it will fester and perhaps metastasize, and we will feel like we were derelict in our duty.

I think we should help Chrome Privacy step up.

2c. Does Privacy team realize they have dropped the ball? I.e. if we try to take it on, will they push back thinking it's still theirs? Or, can we get them on board with our plan and then get them to act on it, solving (2a)?

Which Privacy Team are we talking about? I consider Chrome Privacy distinct from "Privacy Team" (where Garth comes from)...

# EXHIBIT 3

# Redacted Version of Document Sought to be Sealed

#### Message

From: palmer@google.com [palmer@google.com]

Sent: 7/11/2018 4:44:17 PM

To: palmer@google.com; jyasskin@google.com; estark@google.com; kenrb@google.com; ellyjones@google.com;

agl@google.com; sleevi@google.com

Subject: AAAA952KuYI-IULXO2v58wc

palmer@google.com 2018-07-11T16:44:17.423Z

There's some interest in

again

palmer@google.com 2018-07-11T16:44:36.620Z

Mozilla and IPT 2 have everyone what we can do (which is good)

Updated on2018-07-11T16:52:30.089Z

Mozilla and IPT 2 have everyone wondering what we can do (which is good)

palmer@google.com 2018-07-11T16:44:45.067Z

but I remain not on-board with per se

palmer@google.com 2018-07-11T16:44:54.465Z

what do other people think?

• jyasskin@google.com 2018-07-11T16:45:08.462Z

Also https://brave.com/tor-tabs-beta/.

- https://brave.com/tor-tabs-beta/
- Updated on2018-07-11T16:52:18.703Z

Also https://brave.com/tor-tabs-beta/.

- https://brave.com/tor-tabs-beta/
- estark@google.com 2018-07-11T16:45:10.704Z

"Mozilla and IPT 2 have everyone what we can do" <-- missing a word?

kenrb@google.com 2018-07-11T16:49:13.034Z

the question is whether we should consider trying to add web anonymization to Incognito?

estark@google.com 2018-07-11T16:49:30.440Z

estark@google.com 2018-07-11T16:49:38.983Z

and is basically orthogonal?

palmer@google.com 2018-07-11T16:51:51.768Z

Oh, sorry: \*wondering\* what we can do

palmer@google.com 2018-07-11T16:52:12.512Z

@Emily Stark Yes. But, people are just brainstorming.

estark@google.com 2018-07-11T16:53:06.993Z

@Mike West has lots of Thoughts on the ITP stuff, have you seen any of his docs/brainstorms already?

palmer@google.com 2018-07-11T16:53:14.634Z

1 idea was to (!!!). I was like, no.

- kenrb@google.com 2018-07-11T16:53:23.823Z
- palmer@google.com 2018-07-11T16:53:32.557Z

Yeah I joined the list, if that's what you mean @Emily Stark

palmer@google.com 2018-07-11T16:54:15.470Z

a fear is that too-good tracking prevention will just escalate the arms race and we'll end up in a Fingerprinting Nightmare World

ellyjones@google.com 2018-07-11T16:54:16.981Z

We looked at this for Chrome OS many years ago also

- palmer@google.com 2018-07-11T16:54:20.311Z yeah
- estark@google.com 2018-07-11T16:54:25.686Z

in a former life I worked on a project to bundle a node in every webpage

ellyjones@google.com 2018-07-11T16:54:31.290Z

and the people hard passed on the idea of shipping a node on each chromebook - it would have demolished their infra

ellyjones@google.com 2018-07-11T16:54:49.786Z

(this was in like 2011 so maybe things have changed)

ellyjones@google.com 2018-07-11T16:55:03.495Z

I know Sleevi has strong feelings about

- estark@google.com 2018-07-11T16:55:45.126Z
- @Chris Palmer I also fear the Prompt On Every Subresource For Every Webpage Nightmare World
- kenrb@google.com 2018-07-11T16:56:09.079Z

@Chris Palmer but maybe we can reduce fingerprinting vectors to the point where few people are individually distinguishable

• ellyjones@google.com 2018-07-11T16:56:19.715Z

"This website would like to load an image. [Allow] [Deny]"

agl@google.com 2018-07-11T16:58:17.233Z

Clearly the answer is for the whole world to use AMP, then we can expose the AMP cache via a Private Information Retrieval protocol and disable Javascript when rendering.

palmer@google.com 2018-07-11T16:59:15.671Z

that is... wow

palmer@google.com 2018-07-11T16:59:25.640Z

If I weren't already sitting down, I'd need to sit down

jyasskin@google.com 2018-07-11T17:00:45.654Z

I assume everyone's seen https://www.blaseur.com/papers/www18privatebrowsing.pdf? (Thanks @Martin Shelton)

- https://www.blaseur.com/papers/www18privatebrowsing.pdf
- palmer@google.com 2018-07-11T17:01:04.761Z

yep, I am waving it in front of people

• palmer@google.com 2018-07-11T17:01:36.786Z

I am going to get back on my old shit of yelling that we need to stop calling it Incognito and stop using a Spy Guy icon

• palmer@google.com 2018-07-11T17:01:40.468Z

Temporary Mode

• palmer@google.com 2018-07-11T17:02:27.381Z

although that paper does note that people were least confused by Chrome's disclosure (their word for the disclaimer/explainer language)

palmer@google.com 2018-07-11T17:02:54.443Z

Incognito: Voted Least Confusing Private Mode, 2018

ellyjones@google.com 2018-07-11T17:04:37.562Z

good news palmer

ellyjones@google.com 2018-07-11T17:04:47.313Z

we're working on a Dark Mode for Mac Chrome that will probably look quite a bit like incognito

• kenrb@google.com 2018-07-11T17:05:32.947Z

call it 'Dark Web Mode'

• ellyjones@google.com 2018-07-11T17:05:50.778Z

I love it

palmer@google.com 2018-07-11T17:06:44.351Z

sob

kenrb@google.com 2018-07-11T17:07:04.006Z

@Chris Palmer I know the 'incognito' war was waged and lost years ago, but do you remember why? It has always been a misleading name

• palmer@google.com 2018-07-11T17:07:22.790Z

Just as long as we don't get a Dark Intellectual Web Mode (https://www.nytimes.com/2018/05/08/opinion/intellectual-dark-web.html)

https://www.nytimes.com/2018/05/08/opinion/intellectual-dark-web.html

ellyjones@google.com 2018-07-11T17:07:40.746Z

regardless of the name, the icon should always have been http://simpsons.wikia.com/wiki/Guy\_Incognito

- o http://simpsons.wikia.com/wiki/Guy Incognito
- ellyjones@google.com 2018-07-11T17:07:49.327Z

which also accurately conveys the level of privacy it provides I think

palmer@google.com 2018-07-11T17:08:13.654Z

@Ken Buchanan They didn't believe me that people would get confused; and they were still loving the Aw, Snap!/i18n-resistant whimsy thing

• palmer@google.com 2018-07-11T17:08:17.227Z

Maybe now is the time

kenrb@google.com 2018-07-11T17:08:37.081Z

## Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 7 of 219

I see

• palmer@google.com 2018-07-11T17:08:38.747Z

now that we have results from, among others, a person we offered an Enamel job to (Sascha Fahl, co-author)

kenrb@google.com 2018-07-11T17:09:13.964Z

"We have this wall of text explaining to people that incognito doesn't mean unrecognizable, when we use it"

sleevi@google.com 2018-07-11T20:03:52.557Z

Yes, Eric Roman has similarly Strong Feelings about	. In theory, I'm not opposed to
	is that it's
largely un(der?)staffed. Between	, things just get really weird and unpredictable. I
mean, same as Android, just more weird.	

# **EXHIBIT 4**

# Redacted Version of Document Sought to be Sealed

#### Message

From: Rachel Popkin (Google Docs) [comments-noreply@docs.google.com]

**Sent**: 12/10/2018 9:33:08 PM **To**: mardini@google.com

Subject: Synthesized Themes for Browser 6 Pager

Rachel Popkin added comments to Synthesized Themes for Browser 6 Pager

New

2 comments

New

## Comments

## Adrienne Porter Felt

We have to stop thinking about privacy as a bit flip within Chrome and instead think of it as a core part of our product. We have to re-think flows from the beginning, making it transparent to users when and how their data is being shared and then give them the control to either edit or remove that data. We have to be able to do this for our first party relationship with Google, through third-party relationships with websites, and within the complexity of shared-device scenarios.

something we need to decide: how far do we want to go with this?

do we want to stop opting people in to by default? do we want to build federated analysis with

## Her

#### Parisa Tabriz

I think we need to understand what problems we're solving first. For example, even if we could design and publish a provably privacy-preserving system to do ad remarketing, I'm not sure if that makes it any less creepy to users or will mean Apple criticizes us any less.

I'd love to be challenged on this, but I don't think we get criticisim because is opt-out, or even got any criticism when we made the opt-in-to-opt-out change. My guess is because (1) most users don't care about/understand this level of detail (2) users that do care think the tradeoff and change was reasonable.

From my view, sync/identity/privacy+security-settings are just way too complicated, and users can't make any reasoned tradeoffs for themselves without more help. Also, incognito is a confusing mess that also doesn't have high user awareness, and all of this makes situations where people use Chrome in shared settings dangerous (w.r.t. privacy). If we could materially address some of these problems, I'd be pretty happy.

## 

#### AbdelKarim Mardini

I don't think and the likes are the issue. If we're talking about user perception/feelings, there is a clear PR/narrative issue that needs concerted x-functional effort to fix regarding privacy, in-product as well as off-product. It's also not a Chrome issue per se but a Google issue overall and Chrome is collateral damage.



#### Rachel Popkin

I just caught up with bgalbs on potassium's 2 year plan, and I'm newly worried about history sync. Let's discuss!

ReplyOpen

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 10 of 219

2000	AbdelKarim Mardini		
	who remix and create content		
	The mental model I had been using here is the creation of public "Play Lists" about topics (well, Reading Lists", I guess that are analogous to users who create public Deezer/Spotify Plalists, or public maps with interesting stuff on it,etc. I this what you mean by remixing?		
P Mark State of the Control of the C		Rachel Popkin	
		I think remix involves changing or layeri on something new - but maybe curation i part of that! I love the idea of play lists for the web on certain topics.	S
ReplyOpen			
		Simplestand was a first one on a second or	
Google Ll	LC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA		
	received this email because you are a participant in the updated discocs sends you. You can not reply to this email.	sussion threads. Change what	

# **EXHIBIT 5**

# Redacted Version of Document Sought to be Sealed

#### Message

From: Lorraine Twohill [lorraine@google.com]

Sent: 1/29/2021 3:30:31 AM

To: Sundar Pichai [sundar@google.com]; Rahul Roy-Chowdhury [rahulrc@google.com]; Jen Fitzpatrick

[jen@google.com]; Luiz André Barroso [luiz@google.com]

Subject: Today is Data Privacy day...so please read!

Hi folks.

With the greatest of respect, and apologies in advance for my ramblings...

L.

## What I think we need:

Much more visible comms on and off product

3. 4.

1.

Privacy as a feature/products making meaningful change

6.

7.

8. Definitive progress in ads, including showing that we are ok losing out too

9.

10.

Owning our absolute strength in security

12.

13.

14. Other random ideas that could help

## 1. Much more visible comms on and off product

In 2020, we sent over users to our privacy check ups and to our security check up from our homepage and promo efforts. But it feels completely separate from those *moments of truth* when a user is inproduct and needs our help. What if we:

There's a number of moments in product where we already use the shield and messaging to signal

## Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 13 of 219

privacy and security protections (e.g., "only you can see this" for Google Account related queries in Search and in My Activity). But we need to accelerate implementation across PAs so it shows up in the products people use every day.

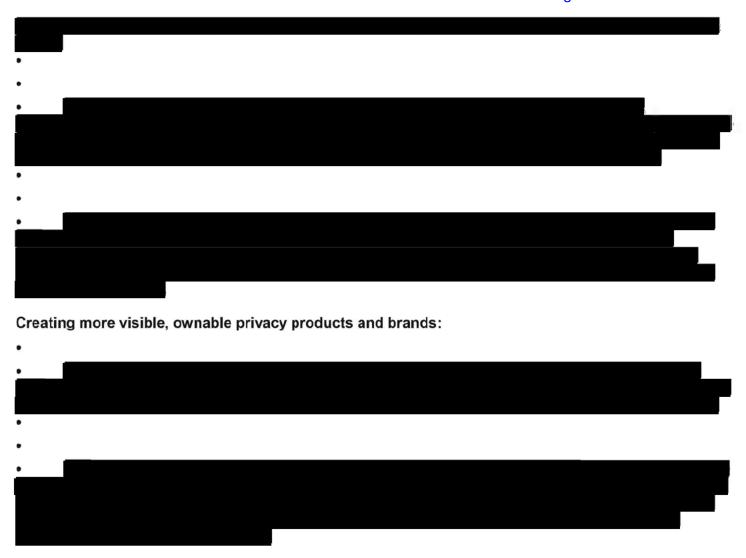
- Increase user facing reassurances in-product: No more unexplained features or cross-product data usage that freaks a user out. We know that a feature can trigger user concern over how their data is being used and why (particularly x-app). Increase investment and prioritize to provide users with helpful transparency, education, and access to their controls in these moments.
- Explain ourselves much, much better. And do that everywhere. This is not new work but is a compelling way of talking about the data we have, 3 types of data, stuff you save, stuff you do (your activities) and stuff we use for ads (much smaller). If we did this well, everywhere, including in your Google Account, it would help a lot.
- Move our promo real estate to the TOP of the screen in mobile. Instead of push-up promos, move them to the top of the screen so they are unmissable. Instagram P&S promos are at the top of the screen, Twitter's promos are overlays. At the bottom of the screen, ours don't have the same gravity and visibility, making our P&S messages feel unimportant/optional. By adding some friction we will increase engagement and demonstrate to users and KOFs that privacy and security are a top priority.
- Establish GSEC(Google Safety Engineering Center) in the US. Building on the successful launch of <a href="MSEC Munich">GSEC Munich</a> (and GSEC Dublin) let's identify key offices where we have strong privacy efforts (e.g. Cambridge for Chrome) and establish GSEC in the US as a key part of our KOF outreach efforts.

## 2. Privacy as a feature/products making meaningful change

We need more products built upon our privacy north star that PDPO has been championing. Our collaboration with <u>Pay is a good example</u> of how a product can build privacy and security right into the product ('A safer way to pay'). But there is more that is needed to ensure that across the company we live up to the new privacy principles and develop consistent, scalable privacy features that bring those principles to life. Could we start with:

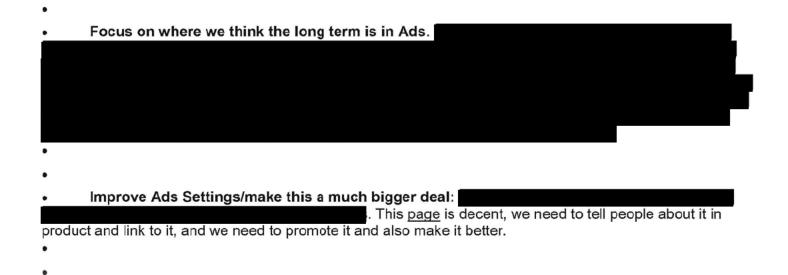
### Giving users more transparency and control over their data





## 3. Make faster and more demonstrable progress on ads

Users point to our ads as THE reason why they can't trust Google and why they think we sell their personal information to 3rd parties. While we have made great progress with things like our recent Privacy Sandbox announcement there is more we need to do here faster. We could start with:



## Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 15 of 219

Making Mute this Ad a more valuable property. Every ad has 'mute this ad' but the current experience is limited and does not allow us to tell our story to our users.
•
Accelerating potential changes in ad retargeting.
•
<ul> <li>Further accelerate Privacy Sandbox efforts: As part of the Privacy Sandbox effort to replace</li> <li>3P cookies in Chrome,</li> </ul>
<ul> <li>Push for Privacy Norms faster: In parallel to Privacy Sandbox, Ads is working to get internal</li> </ul>
alignment on a
0
o Increase velocity around Experiments: Beyond the Privacy Sandbox and Privacy Norms efforts, there are also user experiments being conducted in Ads, such as one that
•
<ul> <li>Explore tagging ads that preserve privacy. Introduce a</li> </ul>
anonymized). Make this work across all surfaces, building from Chrome. Brand these ads!  •
•
• Mythbust Data Selling: of users believe we sell their data. We need to do more to communicate to them in-product that their data is never sold and never shared without their permission.
4. Owning our absolute strength in security
We do a lot to keep people safe across Chrome, Android, Gmail and your Google account but people have no idea. We keep lots of KOFs safe and governments, but do we tell them? Users see privacy and security as two sides of the same coin so our leadership here is a huge opportunity. Could we:
•
• <b>Develop a bolder Security claim.</b> What is the equivalent of "Never sell our users' personal information to anyone" for Security. Our current <u>version</u> ("Build the strongest security technologies into our products") does

not seem bold enough.
•
•
Humanize our Security efforts:.
•
•
<ul> <li>Add helpful security tips to every security email. The emails we send to verify when users have signed into a new device are the most frequent email we send - super high volume and frequency of impressions - so much so that there are memes online about Google Security detecting anything suspicious</li> <li>•</li> </ul>
Mana visibly surface security benefits in user common. Denoised users of all the secucions where we
<ul> <li>More visibly surface security benefits in user comms. Remind users of all the occasions where we have their back. One of the reasons MSFT is scoring well on security is that you have to consciously update versions, install virus protections, etc. In our case we do a lot of that invisibly (in Chrome/Chrome OS/Android/Play Protect/Gmail). For example we could:</li> </ul>
•
<ul> <li>Treat users like VIPs when security issues arise: Beyond communicating how we're activating our 'automatic' protections, such as spam protections in Gmail,</li> <li>.</li> </ul>
Incentivize users to use our security features. Put our money where our mouth is. Show that we care about our users' safety so much we will
5. Other random ideas that could help
These are various other areas we could invest in that would help. We should think about:
•
•
•
•
•

## Developing an

If you got this far, thank you for reading!

Your privacy obsessed pal...

L.

# **EXHIBIT 6**

# Redacted Version of Document Sought to be Sealed



## Goals for today:

- 1. Educate: Systems in place to understand KOF sentiment/action
- 2. Go Deep: KOFIQ
- 3. Discuss: Gaps / asks

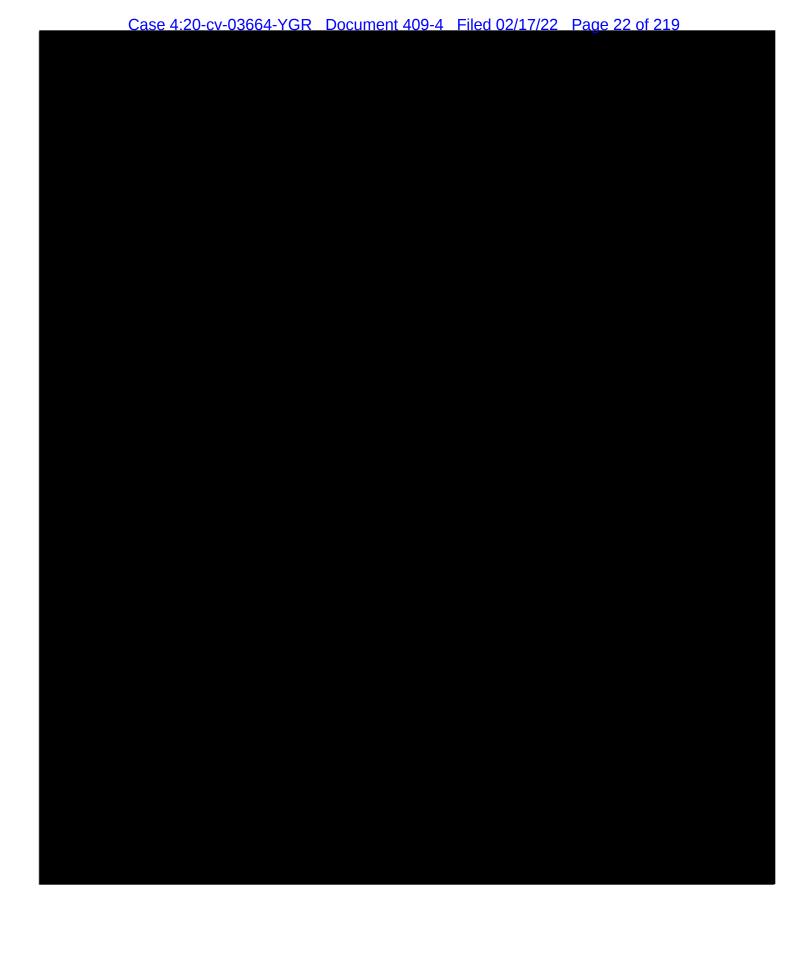
## Why KOFs?

- 1. Significantly more pressure from KOFs globally
- 2. More marketing investment than ever before
- 3. Increased research demand; new systems in place

google\_l ogo il, insightslab

# What can we learn from KOF IQ? EMEA

 KOF Social Listening has been running in EMEA for the past few years (since 2018 for KOF, and 2017 for consumer) but this year we transitioned to a globally aligned structure

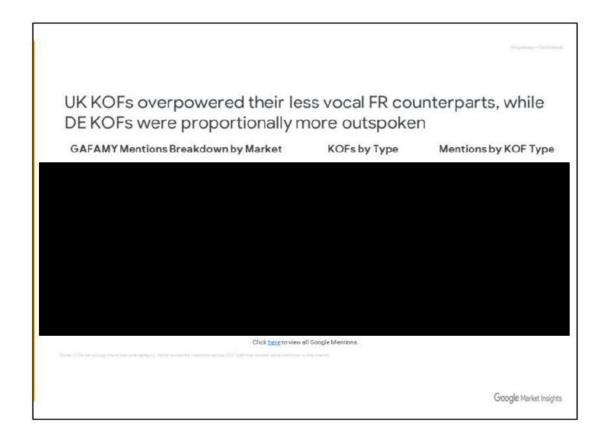




- A Google KOF mention is when one of our KOFs is mentioned alongside Google. This includes mentions that are ones to be further analyzed and fall within our topic structure and those that fall outside such as a mention saying "Google posted record sales", or passing mentions of Google in a side headline.
- A KOF All Topic Google mentions are mentions that fall within Corporate Responsibility, Economic Contribution, Technology, Products, Initiatives & Events.
- KOF Main Topic Google mentions are those that fall within Corporate Responsibility, Economic Contribution or Technology.



- This is taken from our recently released grtly report
- One key learning from is that Google is being grouped together with GAFAM as 'big tech' and this is impeding our overall perception
- Several years ago, we saw in Europe that Google and Facebook were consistently mentioned in tandem. Google took decisive steps to differentiate (in terms of Policy approach) ahead of the Cambridge Analytica scandal, and this lessened the damage
- This is something that we need to address again in Europe, as it exacerbates 'market power' perceptions and we actually see Google sentiment is more positive when discussed in isolation of other 'big tech'
- Data and tax are the other key issues in Europe



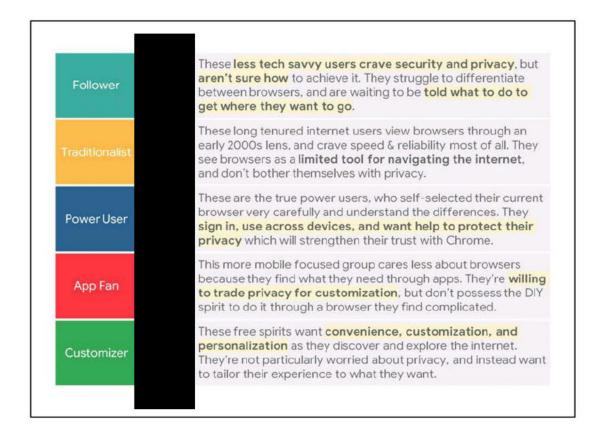
# **EXHIBIT 8**

# Redacted Version of Document Sought to be Sealed



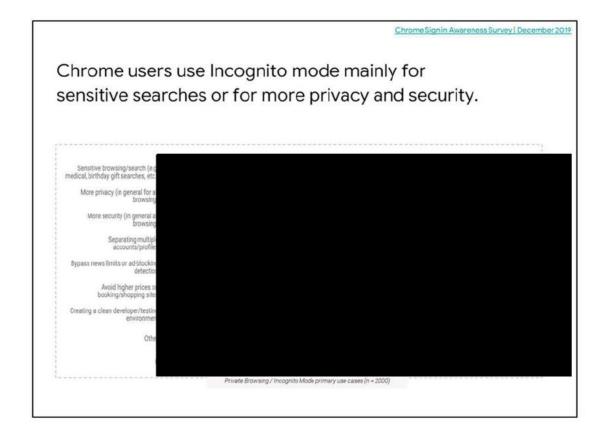


Chrome User Segments (US)

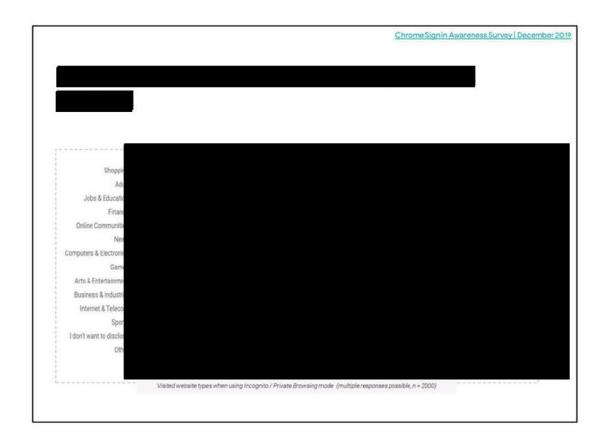




Use Cases	









Identity-related vs. Context-dependent Use

Users see Incognito as a "Mode".

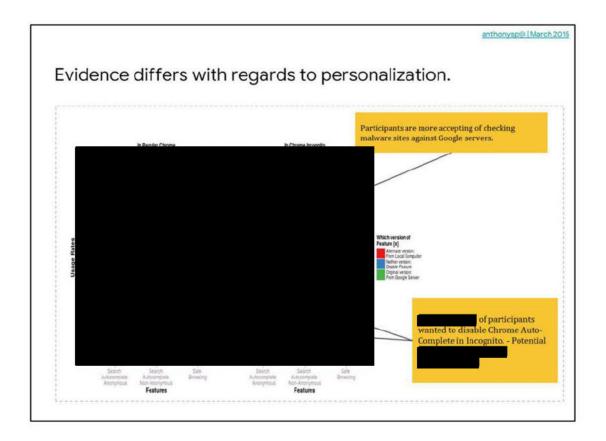
When asking the participants if incognito is a mode, a state, a type of an account or something different, all participants describe that "incognito is a mode".

Assistant | July 2019

# Evidence differs with regards to personalization.

#### A Google Assistant version that still "knows them" seems very appealing

- Many users said that a version of "private mode" that they would use is one that doesn't record any interactions, but may still use information about them.
- Users had a variety of opinions for what information it should remember about them from before the "private session."
- Unclear how many would actually use this but the existence itself is comforting.



Incognito Users\*: What if Feature [X] is Implemented in a more Privacy Observant Manner? (N = 99)

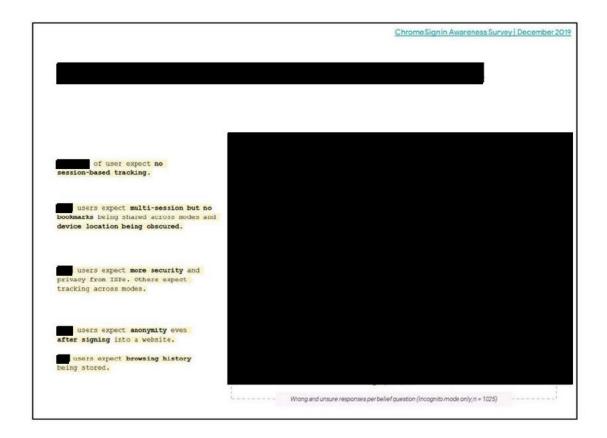
\* Uses Incognito at least once per month

Misconceptions & Expectations

sumUX Research | March 2020 Chrome Lit. Review | 2018

What do users think private modes are? What does it do or not do? Do users understand what works or doesn't work when they are in the mode?

- Participants overestimate private mode protections. There are several common
  misconceptions about private mode, including that it prevents all external parties
  from accessing user data and search history, safeguards against hacking, and
  protects against tracking and ad targeting... gives anonymity, obscures location,
  hides browsing activity from Google...
- Participants do not understand how private mode works. Although participants
  understand search history and cookies are not saved in private mode, they do not
  understand its technical mechanisms or that private mode has limited protection
  against external parties.
- Participants expect limited functionality in private mode. There is some evidence
  that participants don't expect websites/applications to fully function in private mode.



Tactical Research

sumUX Research | March 2020

Do users expect private modes to stay on for all future sessions until they turn it off? How would participants react to having their private session expire after a certain period of time? Indirect evidence...

- expect to manually terminate private sessions. Participants generally understand that they must exit their private browser to end their session.
- like automatic timeouts of private sessions. Some participants are concerned
  their information will be made vulnerable if they forget to end their session.
  Automatic timeouts may make them feel more secure, and participants already
  expect automatic session terminations when logged into sensitive accounts (i.e.
  banking, healthcare sites).
- appreciate system reminders. Some participants find it difficult to tell when they
  are in public vs. private mode. Given the concern about forgetting to end a private
  session, better indicators about the status of a private session may help participants
  feel more secure.

# But, auto-expire is differently perceived.

#### Background:

 This study aims to understand users' motivations for and expectations of using incognito mode in GMM.

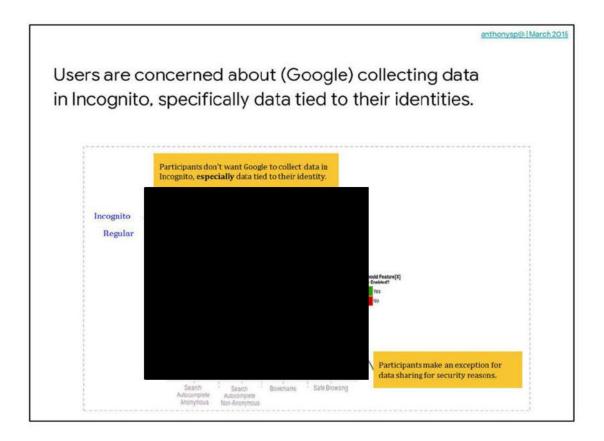
#### Auto-expire:

 Auto expire did not resonate with users; almost all expected the session to remain on permanently.

#### Data storage:

+ Most ppts expected their location history to be private at the GMM account and device levels. There was no consensus on whether or not Google saved this information. Several expressed disappointment, but not surprise at the prospect of Google saving this data.



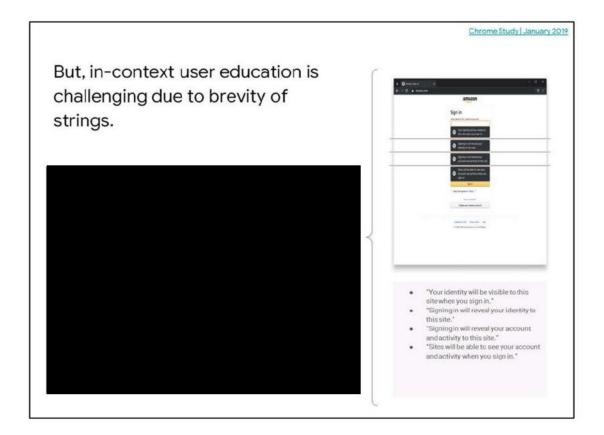


Incognito Users\*: Should Feature [X] be enabled in Regular vs. Incognito (N = 138) \* Uses Incognito at least once per month

sumUX Research | March 2020

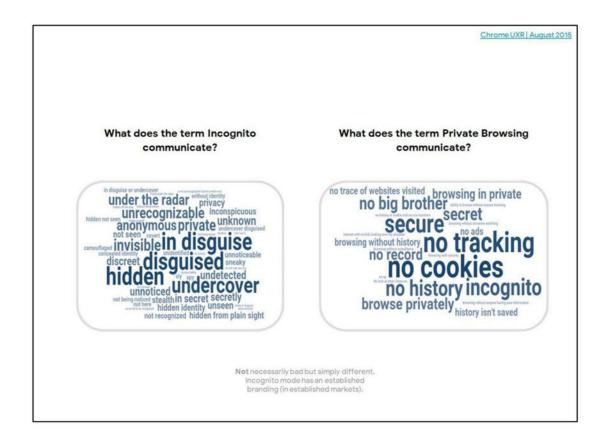
What are any risks or potential moments when trust might be lost with participants while in private mode? How can these risks be mitigated or minimized?

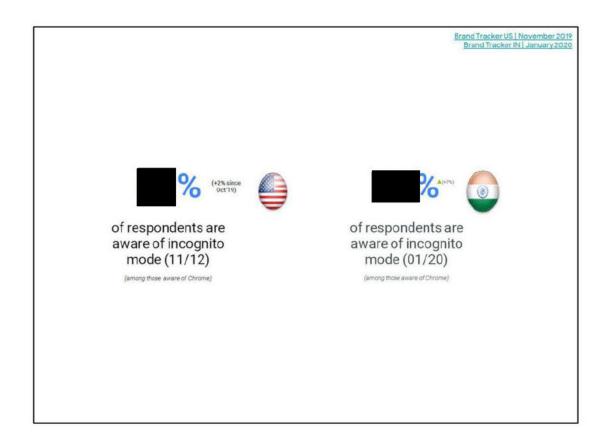
- Not being made aware of private mode limitations. Given that participants overestimate private mode protections, participants are surprised and feel misled when made aware of private mode vulnerabilities.
- Being shown ambiguous or misleading disclosures. Although participants often click through or ignore disclosures, disclosures should be difficult to ignore in order to clear up misconceptions and mitigate potential trust violations.
- Having personal information leaked. Settings that clearly show when they are in private mode, easy control of the mode, and control over information sharing may mitigate this concern.
- Receiving targeted ads or suggestions. Unless it is clearly disclosed that their activity may be trackable, receiving targeted ads or suggestions based on private mode activity may erode trust.



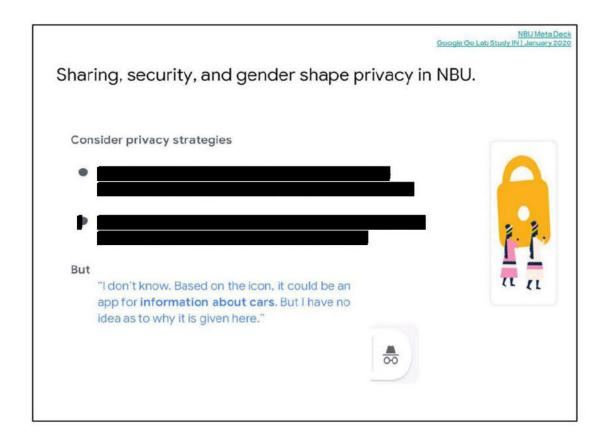
No statistically significant differences between any group (p=

Branding, Awareness





NBU
NBU



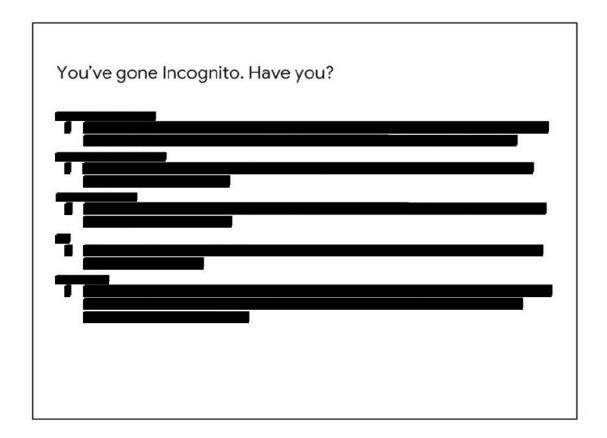
Google Go Lab Study IN | January 2020 LS-NG: No History Mini Learning 3

### NBU users are not familiar with Incognito Mode.

- Some words in the disclaimer text (particularly "school", "employer", and "internet service provider") confuse participants.
- A Mini Learning video aided comprehension, and most said they understood the main purpose of Incognito after watching. However, only a few could demonstrate its use.
- Most understood the No History concept from the Mini Learning Video



UXR Recap



# **EXHIBIT 9**

# Redacted Version of Document Sought to be Sealed

# The Incognito Problem Chris Palmer (palmer@)

Key Fact: Incognito Confuses People

# "Incognito" Confuses People

We know from intuition, anecdotes, and now empirically (Yuxi Wu, et al.; see also Habib, et al.) that the "incognito"/Spy Guy branding, and the complex disclosures (like all complex disclosures), confuse people as to what exact guarantees it offers and does not offer.

Ironically, across all browsers, Chrome's disclosures were the least confusing by a modest amount. But it's still bad.

ld	Date	Text
1	07/22/2018 07:53:36	It'd be good to try to replicate or further validate the study, but I'd be surprised if we got a significantly different result.

WWW 2018, April 23-27, 2018, Lyon, France

Yuxi Wu, Panya Gupta, Miranda Wei, Yasemin Acar<sup>†</sup>, Sascha Fahl<sup>†</sup>, Blase Ur

Table 5: Scenarios where participants held misconceptions, shown with the correct answers and percentage of participants who gave incorrect answers. For comparative scenarios, (in)equality symbols denote the correct answer, and we give the sum of all participants answering otherwise.

	Answer		% Incorrect	
Scenario	Std.	Priv.	Std.	Priv
Overestimating private mode's	privacy	protecti	ons	
Search queries associated (logged in)	Yes	Yes	1.5	56.3
Bookmarks saved across sessions	Yes	Yes	25.4	46.5
Geolocation can be estimated	Yes	Yes	5.2	40.2
Employer can track browsing	Yes	Yes	1.1	37.0
Better protected from viruses/malware	Std.	= Priv.	2	7.1
IP address can be collected	Yes	Yes	0.7	25.2
Government can track browsing	Yes	Yes	4.1	22.6
ISP can track browsing	Yes	Yes	3.0	22.0

Table 6: Distinguishing scenarios where private mode's impact depends on the browser or context.

		% Yes	
Scenario	Std.	Priv.	
Items in shopping cart saved across sessions	97.8	78.8	
Browser extensions active across sessions	98.3	69.1	
Forensic expert can reconstruct browsing history	98.7	52.8	
Site-specific preferences (e.g., for pop-ups) saved	98.3	31.3	

Table 7: Distribution of responses for comparative scenarios where the impact depends on the browser or context.

% Response		% Responses	
Scenario	Std. > Priv.	Std. = Priv.	Std. < Priv.
Amount of ads	32.2	64.9	2.9
Page loading speed	24.8	53.6	21.6

 $(\chi^2(12)=38.1,p=.001)$ . In the control condition, 32.4% of participants mistakenly believed downloaded files would still be listed in the browser. A higher proportion of participants in Brave (62.2%,

<sup>\*</sup>Except in Brave's private mode, which does retain download history

# This Is Bad

We are over-promising and under-delivering.

This is bad for people and reflects badly on our product when/if people do come to understand.

Key Question:
What Do People
Use Incognito
For?

# Why Do People Use Private Modes?

#### From Wu, et al.:

- 1. Hide browsing history, especially visits to adult websites;
- 2. prevent targeted ads and search suggestions;
- 3. achieve "safer" browsing;
- 4. Prevent browsers from saving login-related information;
- 5. avoid cookies;
- 6. accommodate intentional or unintentional use by others.

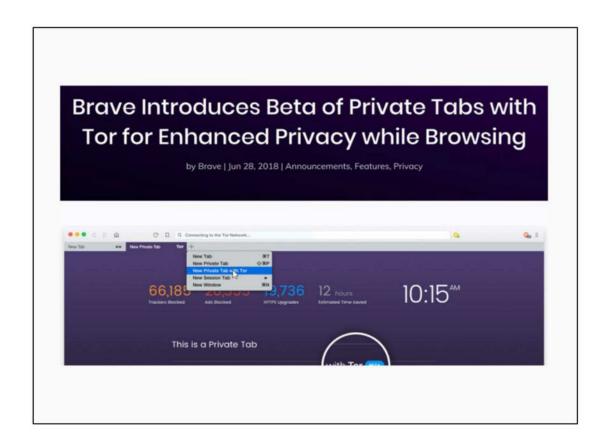
ld	Date	Text
1	07/23/2018 13:28:04	what's the motivation here? how does this differ from 2?
2	07/23/2018 13:28:04	This is a list of reasons that people reported to the researchers for why they use private browsing modes. Part of the point of the research is that people don't fully understand the mechanisms.

# Incognito Is Overloaded

Those 6 reasons are related but different. Perhaps we really need multiple modes (we've already got Guest mode)?

Or more and easier affordances for privacy and control in Settings/elsewhere?

# Key Fact: There's A Privacy Feature Race



#### tom's HARDWARE

PRODUCT REVIEWS BUYING GUIDES HOW TO DEALS NET

#### A Firefox Competitive Advantage

The Tor Project developers said that Project Fusion has the accord of Mozilla's CEO and CTO, which probably means it has a high chance of coming to fruition. However, many issues have to be considered first, such as developing private telemetry, fixing the problem with fingerprinting resistance breaking websites, and so on.

Additionally, Mozilla wants to first standardize the Tor client specification, write conformance tests for it, and open the documentation. All of that means that more people could look at how Tor is implemented in Firefox and see if there are any issues with that implementation.

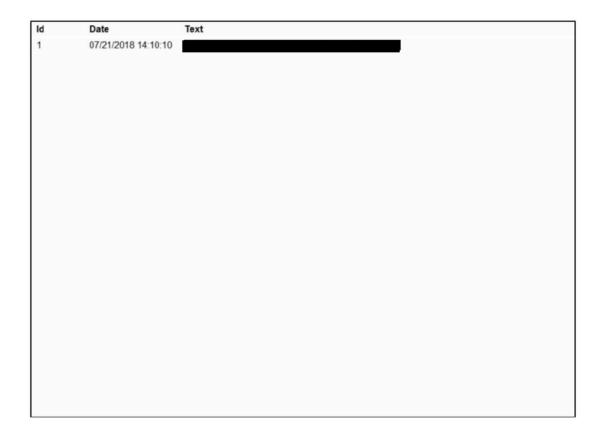
The main reason why Mozilla would even want to integrate Tor into Firefox is because it could provide its users real private browsing, something that most competitors will not be able to offer. Mozilla has taken an increasingly strong pro-privacy stance in the past few years, and Project Fusion could further boost its pro-privacy image.

It could also put Firefox in a much more direct contrast with Chrome, a browser developed by Google, which is heavily invested in user tracking in order to serve more targeted ads.

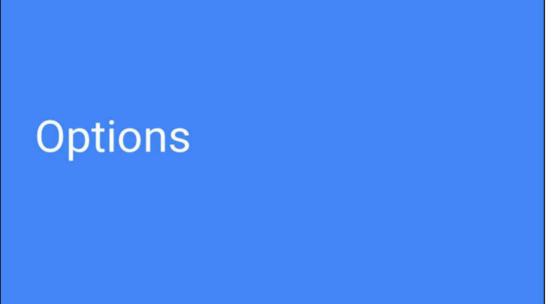
# ITP, ITP2, ITP3

Safari and Mozilla are moving in this area, and we'll need to have some kind of response as well.









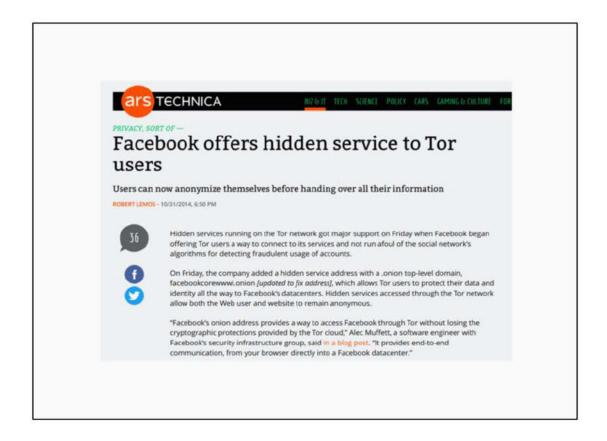


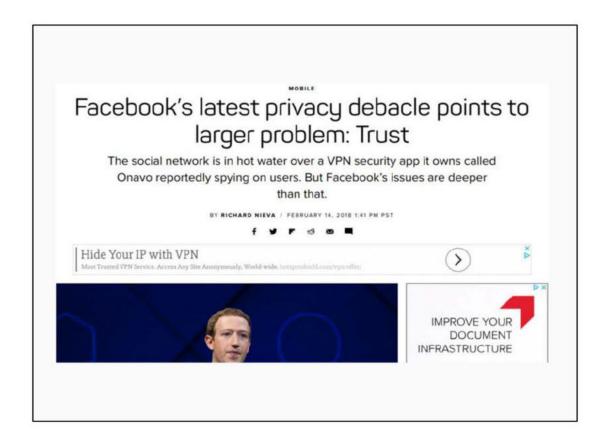






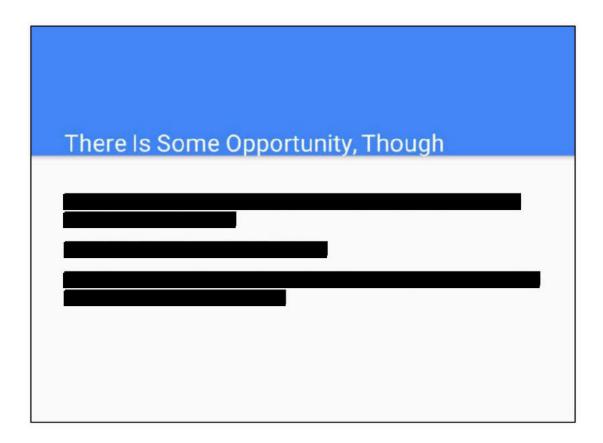




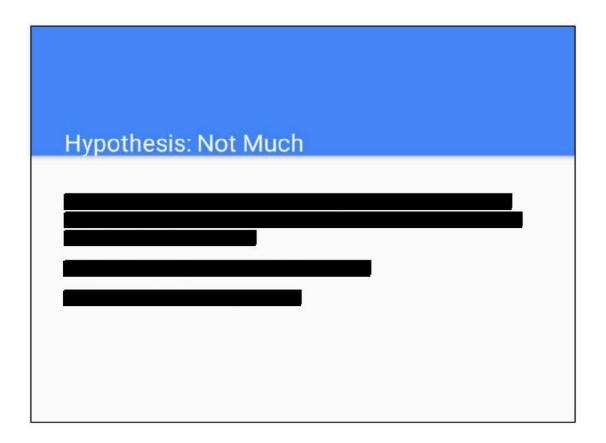




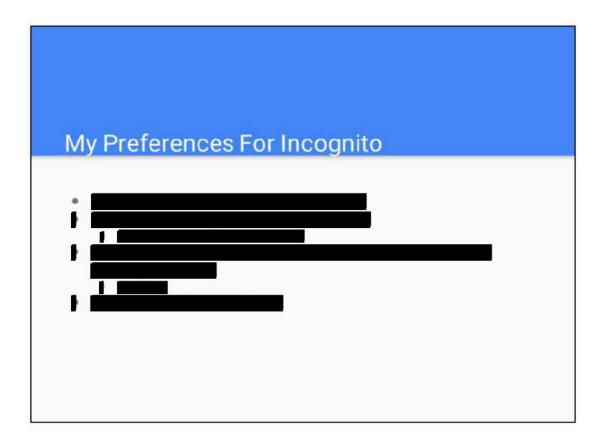
source: https://gist.github.com/kennwhite/1f3bc4d889b02b35d8aa

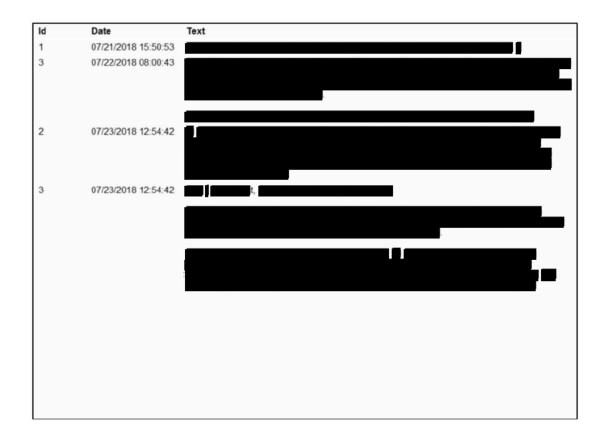


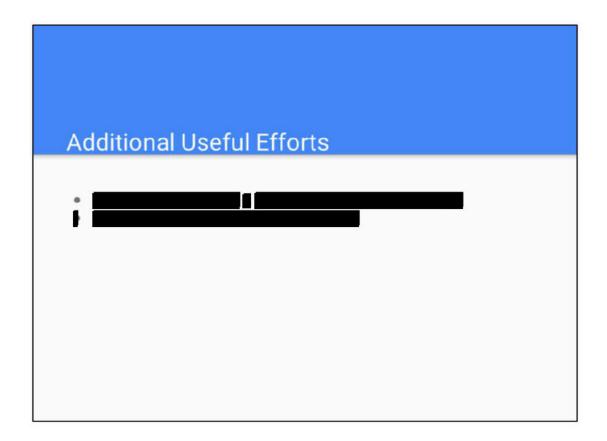
Key Question:
How Much
Breakage Will
People Tolerate?



Conclusion: Options, But No Single Clear Path



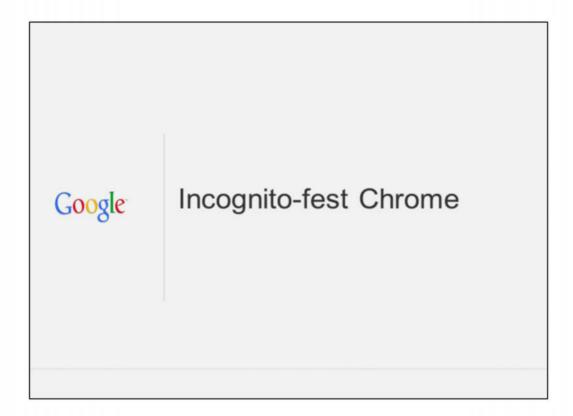


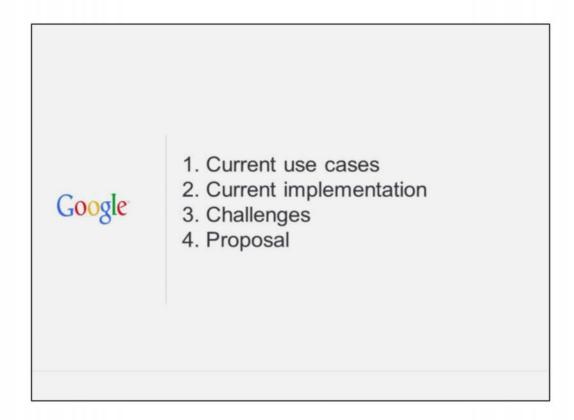


# EXHIBIT 10 Redacted in its Entirety

# EXHIBIT 12

# Redacted Version of Document Sought to be Sealed







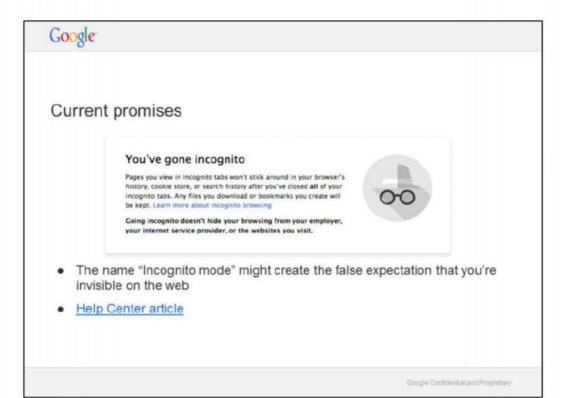
### Google

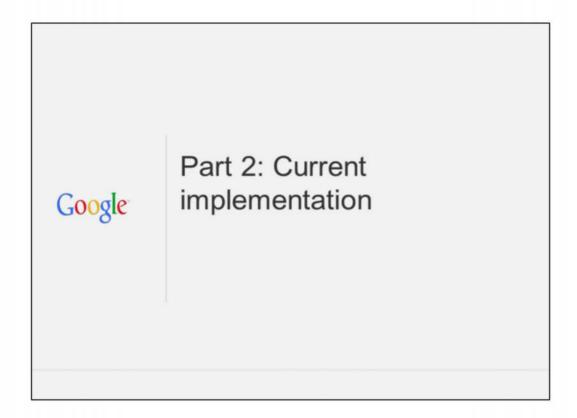
#### Currently supported use cases

- user wants to hide browsing activity to someone with access to the device (e.g. spouse)
- user doesn't want information about their browsing be tracked longtime on the internet (readvertising, records in search history)
- user doesn't want information about their browsing to be shared with Google

Google Confidential and Proprietary

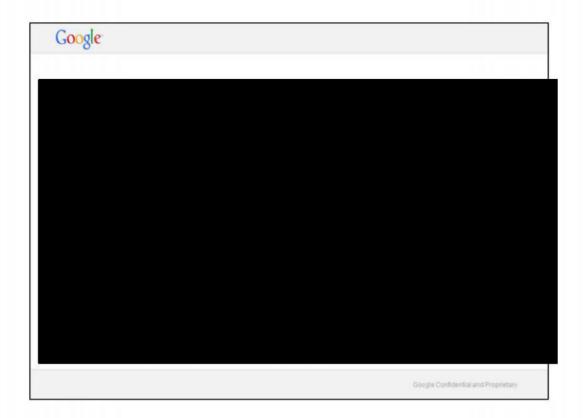












## Google

#### What else is incognito mode?

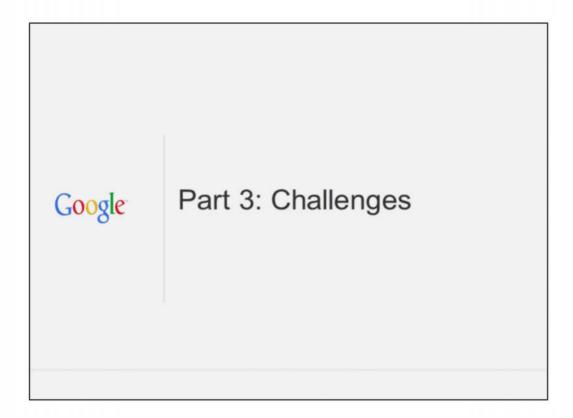
Don't talk to Google in the background

- Online spell-checking disabled
- URL auto completion disabled
- No geolocation in omnibar searches

#### Start with a fresh profile

- · Empty local storage
- · Passwords are only filled on user request

Google Confidential and Proprietary



# Google

#### Challenges & limitations

- Misinterpretation of definition (see Eric Schmidt quotes)
- Tension about definition across teams (e.g. discussion on linkability due to HSTS)
- Limitations on iOS
- Finger printing

Google Confidential and Proprietary



# Google

#### Objective

- · Keep it useful
- . Keep it at least on a par with other browsers
- No degradation
- Decrease misunderstanding
- Allow users to trust Chrome when they don't want it to connect to Google

Google Confidential and Proprietary







## Google

## Unwanted events to be prohibited

- People walk up to computer and can see what user has done in incognito mode before.
- Data leakage: User is greeted in incognito mode with ads / account name / ... that transcended from a previous incognito session or regular mode.
  - We will add a disclaimer that explains the limitations (tracking by governments, employers, ...; tracking via fingerprinting).
- Users are surprised that Google gets information about their browsing while in incognito mode.

Google Confidential and Proprietary

ld	Capate	Text
2	02/26/2015 14:43:20	Is this bad? There is some personalization currently in Incognito already. Having an account name is similar and would make sense if the branding matched it. (i.e. the mode was about forgetting activity during the session and not about being a spy)
2	02/26/2015 14:43:20	



## Google

## Fingerprinting

- Most users do not feel threatened by fingerprinting as long as it has no perceptible impact on their browsing.
- Major websites use it only for "good" purposes.
- Our position:
  - We condemn the use and make it harder (e.g. introducing noise into canvas fingerprinting)
  - We don't limit incognito mode functionality because somebody could use fingerprinting (if we accepted fingerprinting in the threat model, we would end up with a useless or non-existing incognito mode).

Google Confidential and Proprietary

## EXHIBIT 13

## Redacted Version of Document Sought to be Sealed



# Incognito-fest Intro

2.26.2015

http://go/google-incognito

CONFIDENTIAL



# **Goals for Today**

- Understand the history and current state of Incognito across Google.
- 2. Agree on goals of Incognito (supported use cases).
- 3. Understand product options. Define limited set of these.
- Reach recommendation on the best option for the next version of Incognito across Google platforms.

# **Not Goals?**

Find an actual brand?

Google Incognito Confidential & Proprietary Google

# **Agenda**

- Intro (this!)
- Chrome
- Android
- Internet of Things
- UER summary
- (break)
- Deep dive

Google Incognito Confidential & Proprietary Google

# Known: Incognito is successful

- Somewhere between weekly actives in Chrome.
- Meets real user needs.

# **Implications**

Incognito is worth pursuing.

Confidential & Proprietary Google

Google Incognito

# **Known: The Brand is Wrong**

- Users often misunderstand what Incognito does.
- "Incognito" implies spy-related functionality that we don't want to provide.

# **Implications**

- "Incognito" should be considered a placeholder name.
- We should decide on the best feature to build, then find branding that makes sense.



Google Incognito Confidential & Proprietary Google

# Known: We are in a cross-platform world

- Users move freely between platforms (Chrome, Android, iOS)
- Users have privacy needs on all these platforms.

# **Implications**

- Incognito on multiple platforms makes sense.
- We need a consistent experience to aid in platform mobility.

Google Incognito

# Known: Guest, Incognito both make sense

- Guest provides a blank slate that enables sharing a device with a friend.
- Incognito is personalized but discrete. It gives you your Google experience.

# **Implications**

- Being clear about the roles of Guest and Incognito is important.
- It likely makes sense to offer both.

Google Incognito

# Known: Usability is a challenge

- We need to properly describe Incognito in-context, and make use transparent and understandable.
- Discoverability is also important.

# **Implications**

 We need to design a consistent UX for Incognito that applies across platforms.

Google Incognito

Confidential & Proprietary Google

# break for other presentations

Google Incognito

# **Use case: Sensitive Activity**

- Seeking birth control information.
- Buying a present secretly.
- Porn.

Google Incognito Confidential & Proprietary Google

# Not use case: Dangerous Domains

- Reporting war crimes from a war zone.
- Political dissident fighting established government.

Google Incognito Confidential & Proprietary Google

# Not use case: High stakes comms

- Lawyer communicating in anti-trust lawsuit.
- Corporate researcher transmitting critical intellectual property.

Confidential & Proprietary Google Google Incognito

## EXHIBIT 14

# Redacted Version of Document Sought to be Sealed

#### Message

From: Chris Palmer [palmer@google.com]

**Sent**: 2/11/2015 6:52:47 PM

To: Adrienne Porter Felt [felt@google.com]
CC: Parisa Tabriz [parisa@google.com]

Subject: Re: Incognito-fest 2015

On Wed, Feb 11, 2015 at 4:41 AM, Adrienne Porter Felt <felt@google.com> wrote:

- > Second question. Is Incognito something our team wants to take on? (Palmer, > in Q2 or Q3?) It would take attention and focus away from HTTPS but OTOH it > is also something I know we all care about. Or should we focus on trying to
- > poke the privacy team into action?
- Sure, I can give a brief briefing. What is the best format?
   Document, slides, in-person chat, a CL that has +0 lines and -15000?
   :)
- 2a. I'm not sure we should take it on. It's radioactive: In its current form, it is effectively a lie; in its fixed form (rebranded, clarified) it will be a huge negative press cycle like Master Password was (most people drunkenly screeching: Kevin Poulsen being the lone same voice): in its genericized form

think we killed it unceremoniously and then it will be 100% screeching.

- 2b. If we don't take it on, it will fester and perhaps metastasize, and we will feel like we were derelict in our duty.
- 2c. Does Privacy team realize they have dropped the ball? I.e. if we try to take it on, will they push back thinking it's still theirs? Or, can we get them on board with our plan and then get them to act on it, solving (2a)?

## EXHIBIT 16

# Redacted Version of Document Sought to be Sealed

#### Message

From: Chris Palmer [palmer@google.com]

Sent: 11/6/2018 6:38:47 PM

To: Michael Paddon [mwp@google.com]

CC: Michael Kleber [kleber@google.com]; Mike West [mkwst@google.com]; potassium@google.com; chrome-privacy-

core@google.com

Subject: Re: EFF: "Google Chrome's Users Take a Back Seat to Its Bottom Line"

We certainly do have our blind spots (hoooo boy). You're right that the culture is changing, and what was acceptable is less acceptable now; but I'm not sure EFF is necessarily the bellwether we should look to — I find e.g. Zeynep Tufekei's NYT articles a much more compelling and mainstream-understandable critique.

But whatever; what's more important is that we do something meaningful soon. I've <u>bargled various ideas</u>; we could also tighten the 3P cookie rules or block 3P cookies by default in Incognito. Maybe that's not a good idea for various reasons, but we could certainly ship it and things like it soon if we wanted to.

On Tue, Nov 6, 2018 at 4:13 AM Michael Paddon < mwp@google.com > wrote:

I don't think we can conclude "in general. It does in experiments where advertisers can defect to to status quo. But we cannot conclude what the behaviour would be in the absence of 3p cookies from the entire ecosystem. Put another way, A/B testing is effective for gradient descent but not for finding global minima.

Just as it is easy for us to see EFF's blindspots, we should be aware that we also have enormous blindspots of our own. And so do our advertising partners.

What I see is that the world is changing. The EFF is a bellwether. What was acceptable behaviour in data gathering is becoming unacceptable. I think we need to get out ahead and own the change rather than defending old business models. If the market wants a truly incognito mode, let's give them the best one possible.

On Tue, Nov 6, 2018 at 6:36 AM, Michael Kleber < kleber@google.com wrote: Thanks, Chris, that does help.

Much as I love the "We should continue to reach out and offer to help inform them" point of view in general,

Even internally we hedge and point out that it's different for every site, which is true, but frankly I think this is so locked-down because we don't want to cause industry-wide panic.

Unfortunately, so long as we're unwilling to talk about this detail externally, I don't see a path to substantially changing the narrative.

--Michael

On Mon, Nov 5, 2018 at 2:16 PM Chris Palmer palmer@google.com wrote:

I have worked at EFF twice, first as Staff Technologist & Technology Manager, and again as Technology Director. So maybe I can provide some context. I left EFF and came to Google on the informed belief that I can successfully do more EFF-like work here than at EFF. After 7 years here, I am certain I was right. But, do take this with a grain of salt — I have A Viewpoint and it might not be 100% objective. :)

## 

To answer Michael's question: It's ignorance, not malice. (Sure, they're feisty, but that is good!) Generally, EFF does not think hard about how people who create information goods make money. They have an old-timey Wired Magazine/1990s internet boom/techno-solutionist/"we're already post-scarcity!" ideology that requires them to believe that low marginal cost per copy means that information goods are 'free' to make. You'll see this in their positions on any information good, whether it's software, <u>music</u>, journalism, literature, et c. (They rely heavily on <u>Cory Doctorow's hard-to-replicate experience of getting lucky</u>, which notably involved running a popular ad-supported blog. Doot-de-doo...)

As for "credulous and naive", yes; part of their problem is epistemic closure. (Again, *not malice* — they are good people trying to do the right thing.) They tend to alienate people who could inform them, leaving only people who already agree. For example, they didn't ask me if they had the facts right before posting this post, despite knowing me and that I am on Chrome Security; similarly, AFAIK they have never had anyone who has ever been in the intelligence community on staff.

Their closure also reduces their potential reach, although they do have vocal support in parts of the security engineering community (and, weirdly, vocal opposition in other parts of the security community). We should continue to reach out and offer to help inform them. I don't necessarily expect huge returns from that; Google gave EFF an early view of Gmail and EFF still blasted them for its "creepiness", but I think it was good for everyone to at least have the conversation. It's better than random broadsides like this post.

Ultimately, the blame for people's misconceptions about Incognito Mode is due to that name and branding, as I have argued repeatedly. I believe the Incognito part of this blog post would basically not exist if we had called it (e.g.) Temporary Mode.

Could Incognito/Temporary work better, such as the site- or origin-specific local storage deletion? Sure, maybe that would work. As much as I want to ratchet down the brand and apparent 'guarantee', I am also in favor of ratcheting up the guarantee *where technically possible*. (I'll continue to push back on infeasible or impossible guarantees.)

On Mon, Nov 5, 2018 at 6:26 AM Michael Kleber < kleber@google.com > wrote:

I am really surprised by their never touching on how publishers get money. They (wrongly) claim that "The marginal benefit of each additional bit of information about your activities online is relatively small to an advertiser, especially given how much you directly give Google through your searches". But there is no corresponding thinking about the marginal benefit of the cookie is *huge for publishers*, because without it we have no way to bring *any* of that information to bear on display ad monetization.

Any opinion on whether that omission is ignorance or malice?

Their take on "incognito mode" is very interesting. The idea that it "does nothing to protect you from being tracked by Google" is a rational complaint if you sign into Google in incognito mode (which seems like an oxymoron to me), or if you use the same incognito session for a long time.

Have we considered an

"A sustainable Web needs to be built on consent, not subterfuge" surprises me, in that I would have expected them to be as skeptical of consent as we are. Maybe political considerations mean you can't say that publicly (yet)?

--Michael

On Mon, Nov 5, 2018 at 3:27 AM Mike West < <u>mkwst@google.com</u>> wrote: Ouch. https://www.eff.org/deeplinks/2018/11/google-chromes-users-take-back-seat-its-bottom-line

A few things to call out:

"The closest thing it offers to 'private' browsing out-of-the-box is 'incognito mode', which only hides what you do from others who use your machine. That might hide embarrassing searches from your family, but does nothing to protect you from being tracked by Google." which is an interesting form of the "Incognito should do more" argument.

"Facebook recently announced its intention to <u>move away from using third-party cookies</u> to power Pixel, its third-party analytics product." is a fairly naive and credulous take on Facebook's moves in this space.

"Google could take the lead on solving this problem. Trackers are not necessary to make the Web work, and they shouldn't be necessary for Google to make lots (and lots) of money. As we noted above, Google has mountains of direct information about what you want to buy through its various services, from search to Maps to Google Play. Ads don't need to be targeted using every little bit of information about us that Google has access to via our use of its browser. A sustainable Web needs to be built on consent, not subterfuge." Apparently first-party tracking is fine.

"Google has come under fire in the past for using its power in one arena, like browsing or search, to drive revenue to other parts of its business." I heard a similar kind of argument from one of our friends at Samsung at dinner during TPAC a week or two ago.

-mike

--

You received this message because you are subscribed to the Google Groups "potassium" group. To unsubscribe from this group and stop receiving emails from it, send an email to potassium+unsubscribe@google.com.

To post to this group, send email to potassium@google.com.

To view this discussion on the web visit

 $\frac{https://groups.google.com/a/google.com/d/msgid/potassium/CAKXHy\%3Dc1Ovb\%3DLbdoQeAa7r\%2B9}{y2Kaya7G7xfmtZ3SzKKq8rOa\%2BA\%40mail.gmail.com}.$ 

Forewarned is worth an octopus in the bush.

You received this message because you are subscribed to the Google Groups "potassium" group. To unsubscribe from this group and stop receiving emails from it, send an email to potassium+unsubscribe@google.com.

To post to this group, send email to potassium@google.com.

To view this discussion on the web visit

https://groups.google.com/a/google.com/d/msgid/potassium/CAA6DcCePf9riuRtP%3DgO0u4RUcG6A3%2Bi%3D4YCt2tPonpAPtW0VNg%40mail.gmail.com.

Forewarned is worth an octopus in the bush.

You received this message because you are subscribed to the Google Groups "potassium" group.

To unsubscribe from this group and stop receiving emails from it, send an email to potassium+unsubscribe@google.com.

To post to this group, send email to potassium@google.com.

To view this discussion on the web visit

 $\frac{https://groups.google.com/a/google.com/d/msgid/potassium/CAA6DcCdpq3SfjVdc7yLTZBJ7EnecZWk2XM2DnYm0rtOK718p2A\%40mail.gmail.com.}{}$ 

# EXHIBIT 20 Redacted in its Entirety

# EXHIBIT 22 Redacted in its Entirety

## EXHIBIT 23

# Redacted Version of Document Sought to be Sealed

#### Message

From: Mardini [mardini@google.com]

**Sent**: 4/30/2019 7:14:16 PM

To: Jochen Eisinger [eisinger@google.com]; Shimi Rahim [srahim@google.com]

CC: Margret Schmidt [margrets@google.com]; Parisa Tabriz [parisa@google.com]; Alex Ainslie [ainslie@google.com]

Subject: Re: Branding for Incognito (IO Update)

[narrowing down list of recipients - pls don't forward]

An update on our meeting with Sammit today. We discussed the following:

1/ Debugging the process

- 2/ Got context around the incognito iconography/rebranding for I/O then cancellation
- 3/ Got clarity on who owns that <u>Incognito comms doc</u> and whether our comments are being addressed

1/ Made it clear what the ideal process should be from Chrome's point of view. No disagreements there and it was clear for them but there was a mad rush to get things for I/O from various execs that made folks panic.

2/ This was driven by Lorraine who told the <u>PDPO steering committee</u> that Incognito might need rebranding so a workstream ensued involving the brand studio about 2-3 weeks ago.

Yesterday, at the PDPO SC meeting, <u>Tom Oliveri</u> was present and told them that Sundar didn't want to put incognito under the spotlight so this iconography/rebranding should not be an I/O topic.

The plan of record with regards to incognito in I/O is just to mention in one or two sentences related to bringing Incognito to Google Maps (not clear whether there will be mocks or not for that).

The SC was asked to commit to exploring in 2019 to develop a consistent vision for how an "Incognito 2.0" would look like with impact analysis on revenue, usage, and comms.

Relatedly, Ben Gomes showed a demo of AGSA launching Chrome in in Incognito mode. i.e. if a user is in AGSA and they want to conduct an incognito search, they'd intent into an Incognito NTP in Clank

3/ That comms doc is owned by the brand studio and Sundar's speech writing team. I emphasized the need to double check with Chrome PM/Eng the accuracy of the information mentioned there. Sammit acknowledged but mentioned that the comms around I/O are very closely guarded and it's challenging to get a full picture for what will be said exactly....

Thanks,

--Mardini

On Tue, Apr 30, 2019 at 8:40 AM Mardini <a href="mardini@google.com">mardini@google.com</a> wrote:

Le mar. 30 avr. 2019 à 08:33, Mardini <mardini@google.com> a écrit :

Thank you, Alex.

We (Rory/Ramin/Sabine/myself) have a meeting with Sammit today so will discuss the process and work cadence issue as well.

As discussed in our chat yesterday, Jochen and I will try to get some time with the PDPO folks visiting Munich for GSEC in a couple of weeks to sync in person.

I also didn't receive the note below about revisiting the incognito brand after I/O. Maybe it was sent only to those who replied "yes" to the meeting.

I see it now. Gmail didn't classify it as important:/.

Le mar. 30 avr. 2019 à 07:29, Yuan Chen < <u>yuanchen@google.com</u>> a écrit :

Thank you for keeping us in the loop - I also didn't get the update from PDPO. I agree we need to get into a better work cadence with PDPO folks.

On Tue, Apr 30, 2019 at 2:12 AM Shimi Rahim < <a href="mailto:srahim@google.com">srahim@google.com</a>> wrote:

Thanks for filling us in, Alex & Parisa (I didn't see an email from PDPO), and for helping us navigate I/O challenges!

On Mon, Apr 29, 2019 at 5:03 PM Parisa Tabriz parisa@google.com> wrote:

On Mon, Apr 29, 2019 at 4:42 PM Alex Ainslie <a inslie@google.com wrote: (narrowing to just Chrome folks)

I'm glad to see the update from PDPO below about waiting to tackle any branding updates until After IO.

Ah, me too!

Their timing was too aggressive and their proposal wasn't compelling:/

Here's the Chrome summary from my discussions with many of you (in sequence) this morning:

- Chrome is comfortable with a high level message at IO about expanding Incognito to other flagship Google products on Android (AGSA, Maps, YouTube).
- We've nurtured the Incognito brand for the past 10 years and our team would need to conduct a significant investigation (including UX Research) to feel confident about a change.
- For that reason, Chrome does not support announcing new PDPO-proposed branding at IO
- Additionally, speculative announcements related to Privacy are extra risky because the bar for Google is high and we need to make sure not to promise something we can't deliver.

Chrome + PDPO (Mis)alignment

Should Google	PDPO + Brand Studio	Chrome	
do more product work focused on Privacy?	Yes	Yes	
talk more about that Privacy work in public?	Yes	Yes	
extend Chrome's Incognito mode to other products?	Yes	Maybe?	
change the current Incognito brand?	Yes	Maybe? Err	
announce Incognito branding changes at IO before they've been thoroughly studied?	Yes	No	

Going forward, I agree with Jochen that we'll need to get into a better working cadence with PDPO folks.

Yep. I'd recommend syncing with miraglia@ in a small setting to share how this effort was perceived from the Chrome side so we can reset.

Alex

On Mon, Apr 29, 2019 at 4:00 PM Sammit Adhya < sadhya@google.com > wrote:

Hi Everyone,

Just wanted to let you know that leads decided to revisit the Incognito branding after I/O. Apologies for scheduling the urgent meeting, but we look forward to working with everyone after I/O.

Thanks much,

Sammit

## [Confirmed] - Exploration of Iconography and Branding for Incognito

### Scheduled per Sammit's request

We wanted to share some new Incognito branding and iconography ideas that the Brand Studio team has been exploring to get your thoughts and feedback.

Leads: anilsa, parisa, miraglia

PM: (rorymcclelland), (sabineb), mardini

Eng: eisinger, (rhalavati)

UXR: martinshelton, (lorindole)

UXD: ainslie

Marketing: martinal, jcroom

Brand: mediha, julianneyi, frederick PDPO: sadhya, gregfair, rast

When Tue Apr 30, 2019 3:30pm – 4pm Pacific Time - Los Angeles

Where MTV-900-2-ChromeOZone (8) [GVC, No External Guests], MTV-900-2-Rage Against The Machine (4)

[GVC, No External Guests], SFO-1MST-14-Daniel Handler (4) [GVC], SFO-2HS-4-Eight O'Clock Coffee

(5) [GVC], SYD-ODI-3-410 - Gone (2) [GVC, No External Guests, Phone] (map)

Joining info

Or dial: +

More phone numbers

Who

- Eric Miraglia organizer
- Jieun Lee creator
- Martin Shelton
- · Sammit Adhya
- rast@google.com
- Martina Laresova
- Ken Frederick
- Jochen Eisinger
- James Croom
- · Anil Sabharwal
- Mediha Abdulhay
- Greg Fair
- Alex Ainslie
- Shimi Rahim
- AbdelKarim Mardini
- Martha Welsh
- Julianne Yi
- Parisa Tabriz

## Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 142 of 219

8 3		- 8	
			Ramin Halavati - optional
			Lorin Dole - optional
			Sabine Borsay - optional
			Rory McClelland - optional
3 8	1 3 3 3	1	

--

## Yuan Chen

Interaction Designer

Google Germany GmbH Erika-Mann-Str. 33 80636 München

Geschäftsführer: Paul Manicle, Hallman Detaine Prado Regislergenom und insimmer. Hamiburg. HRB 88891 Sitz der Gesellechaft Hamburg.

Diese E-Maii ist vertrædich. Wenn Sie nicht der richtige Adressat sind, felten Sie diese bite nicht weiter, informeren Sie den Absender und föschen Sie die E-Mai und alle Anhange. Vielen Dank.

This e-mail is confidential. If you are not the right addresses please do not forward it, please inform the sender, and please erase this e-mail inclinding any attachments. Thanks,

## EXHIBIT 24

## Redacted Version of Document Sought to be Sealed

#### Message

From: Jochen Eisinger [eisinger@google.com]

Sent: 3/22/2019 7:42:29 AM

To: Mike West [mkwst@google.com]; AbdelKarim Mardini [mardini@google.com]

CC: Alex Nicolaou [anicolao@google.com]; Michael Kleber [kleber@google.com]; Rick Byers [rbyers@google.com]; Rory

McClelland [rorymcclelland@google.com]; Vivek Sekhar [vsekhar@google.com]

Subject: Re: Follow up from Sundar meeting

### +AbdelKarim Mardini

On Fri, Mar 22, 2019 at 6:13 AM Mike West < <u>mkwst@google.com</u>> wrote: +Jochen, Rory

On Fri 22. Mar 2019 at 05:59, Alex Nicolaou <a href="mailto:anicolao@google.com">anicolao@google.com</a> wrote: Ads Team summary.

----- Forwarded message -----

From: Ben Galbraith < bgalbs@google.com>

Date: Thu, Mar 21, 2019 at 4:33 PM

Subject: Fwd: Follow up from Sundar meeting

To: Jack Chen < ilchen@google.com >, Darin Fisher < darin@google.com >, Parisa Tabriz

<parisa@google.com>, Margret Schmidt <margrets@google.com>, Alex Nicolaou <anicolao@google.com>,
Vivek Sekhar <vsekhar@google.com>, Ivy Choi <ivyc@google.com>, Ben Goodger <beng@google.com>

Cc: Anil Sabharwal <anilsa@google.com>

Privileged and confidential

FYI, here's the Ads team version of the note I sent out earlier.

----- Forwarded message -----

From: Struan Robertson < struan@google.com>

Date: Thu, Mar 21, 2019 at 12:54 PM

Subject: Re: Follow up from Sundar meeting

To: Chetna Bindra < cbindra@google.com >, Jack Chen < ilchen@google.com >

Cc: Jerry Dischler < jdischler@google.com >, Suresh Kumar < sureshkm@google.com >, Shiv Venkataraman < shivav@google.com >, Sagnik Nandy < sagnik@google.com >, Anurag Agarwal < anuragag@google.com >,

Darin Fisher <darin@google.com>, Anil Sabharwal <anilsa@google.com>, Ben Galbraith

<bgalbs@google.com>, Brad Bender <bradbender@google.com>

### +Jack Chen

On Thu, Mar 21, 2019 at 12:37 PM Chetna Bindra < cbindra@google.com > wrote: Privileged and confidential

All,

Thanks for all the collaboration leading up to the Sundar meeting. Overall we had a positive meeting with Sundar, landing on approval for our recommendation in the <u>deck</u>. He acknowledged the complexity of this space and expressed his gratitude on the progress we've made given the complex topic. He specifically said that we do not need to come back for a review, but he would review comms in the lead up to I/O.

Key	ta	kea	wa	VS

- Totally agreed with the strategic value of balancing both ecosystem health and privacy
- Overall comfortable with not removing 3P cookies, but wanted to focus on how Chrome is helping users with 3P cookie concerns (i.e., "3P cookies" have become a strong industry narrative that we can't ignore or wait years to address). He was supportive of our plans to address these issues largely with opt-in controls that we should make sure are incorporated as part of our messaging at I/O.
- Overall approval of plan on data disclosures, Ads Privacy center, Chrome guard controls 3P / Incognito controls
- Focus on messaging by I/O. Ensure it covers the entire proposal data disclosures, Ads privacy center, Chrome controls, data retention within Chrome and Ads. A lot of enthusiasm for "and encouragement to dovetail with the broader Google Incognito narrative if we're ready.
- o (A tactical AI was given to the Chrome team to dovetail with a broader data retention initiative.)
- Comfortable with reactive messaging on saying that Apples 3P cookies removal hasn't done enough, and 3P tracking continues
- Sundar drove the point in the meeting (with several other examples) that if Chrome removes 3P cookies, it would create a very disruptive situation for publishers, and is keen to support overall ecosystem health. He acknowledged that Apple and Google are optimizing for different things.
- He firmly expressed a desire for both Chrome and Ads to get out in public with a narrative ASAP. He felt that silence in the
  market was no longer an option, and alignment that I/O was the right initial moment, followed by GML
- Eventual enforcement seemed to be a punted question

#### Key Als/Next Steps

Evaluate an advisory board rather than a coalition, and learn from the AI advisory board Plug in with the I/O and GML team for messaging

Best

Chetna (on behalf of the team)

Struan Robertson | Director, Legal | struan@google.com | 650-713-7613

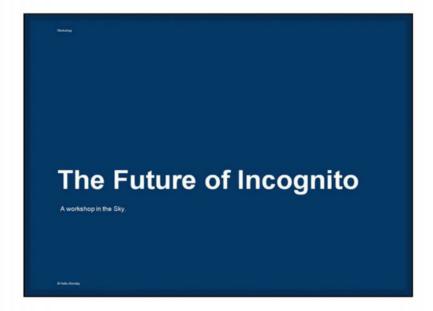
This email may be confidential or privileged. If you received this communication by mistake, please don't forward it to anyone else, please erase all copies and attachments, and please let me know that it went to the wrong person. Thanks.

-mike

# EXHIBIT 25 Redacted in its Entirety

### **EXHIBIT 26**

# Redacted Version of Document Sought to be Sealed

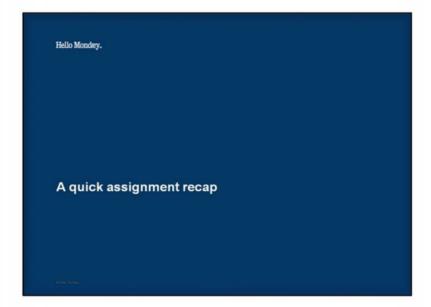


Fulne of integrals		
Agenda		
- Quick introduction (name/role)	5 min	
-Workshop goals	5 min 15 min	
- Recap of the project brief (Sammit)	15 min 25 min	
- Top use cases discussion	20 min	
- Brand wheel discussion	20 min 5 min	
- Onlyness exercise discussion		
- What does success look like?		
- Next steps		
di Hallo Monday		

20-25 min buffer



20-25 min buffer



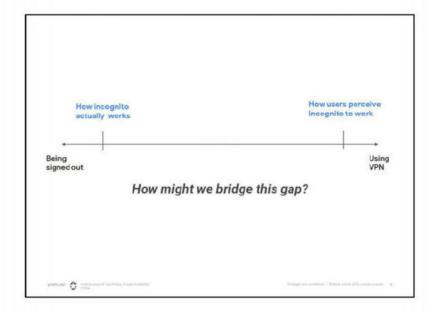
Design a clearly branded, well-defined Incognito experience where the ability to activate and deactivate this mode is **trivially simple**, **intuitive** and **consistent** across our products.

Design a comprehensive **messaging strategy** that helps users understand how incognito works and how to appropriately use it to match its functionality.

property of the contract of th

Proper an authorize Children and a William County

Communication of incognito means



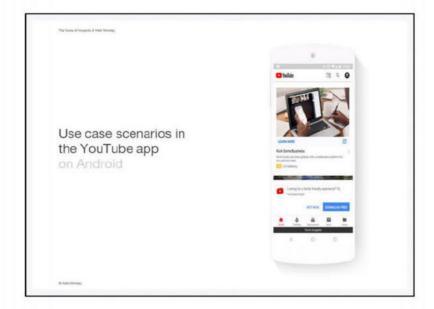


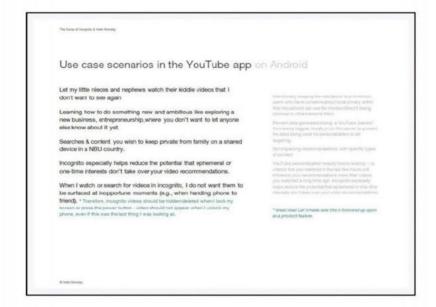


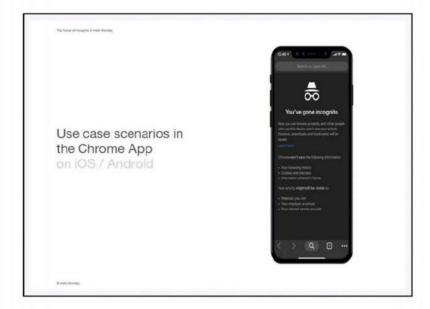




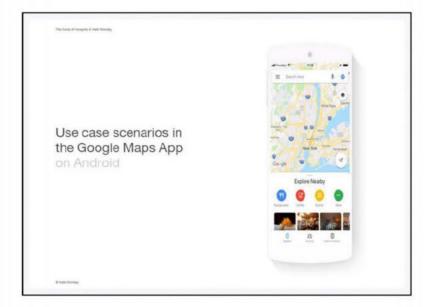




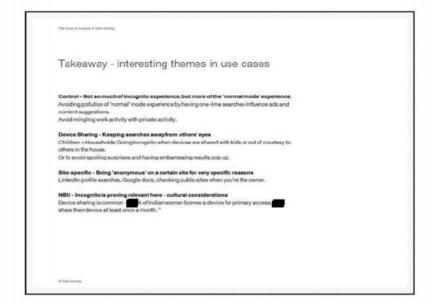
















# EXHIBIT 28 Redacted in its Entirety

# EXHIBIT 28 Redacted in its Entirety

### EXHIBIT 30

## Redacted Version of Document Sought to be Sealed

#### Message

From: Rory McClelland [rorymcclelland@google.com]

Sent: 2/6/2020 3:56:43 PM

To: Christian Dullweber [dullweber@google.com]

CC: Ramin Halavati [rhalavati@google.com]; Angel Maredia [angelsm@google.com]

Subject: Re: Chrome Incognito Metrics

Thanks, both!

On Thu, 6 Feb 2020 at 02:27, Christian Dullweber <dullweber@google.com> wrote:

% of users used the Clear Browsing Data dialog in the last 28 days. % deleted cookies at least once.

On Wed, 5 Feb 2020 at 22:57, Ramin Halavati <a href="mailto:<a href="mailto:rhalavati@google.com">rhalavati@google.com</a> wrote: +Christian Dullweber

Hi Angela,

Based on this query, in the last 28 days, in US, and on Android and iOS, we had unique users of incognito mode and of regular mode. Assuming that all users of incognito mode have also used regular mode, the ratio will be %.

On the clear browsing data question, Christian should know better.

Please let me know if I could help more.

Best,

Ramin

On Wed, Feb 5, 2020 at 9:49 AM Rory McClelland <a href="mailto:srorymcclelland@google.com">srorymcclelland@google.com</a> wrote: Hi Angela,

+Ramin Halavati our Incognito lead to help me out with the two questions. Thanks, Ramin.

Rory

On Wed, 5 Feb 2020 at 07:18, Angel Maredia <angelsm@google.com> wrote:

Also sorry for the follow up email! I was wondering, do you know what % of Chrome users clear their cookies or history on mobile and how often?

On Tue, Feb 4, 2020 at 10:08 PM Angel Maredia <angelsm@google.com> wrote: Hey Rory,

My name is Angel and I'm the PM on Fi leading our privacy and security team. I was looking into Incognito mode for Chrome, and I was wondering, what % of users use Incognito mode on mobile out of total users, focusing on the US?

Thanks,

Angel

### EXHIBIT 31

## Redacted Version of Document Sought to be Sealed



Steve Hamilton <sthamilton@google.com>

#### What we know about Incognito users (re. The most underused Privacy Surface) 7 messages

Steve Hamilton <sthamilton@google.com>

Wed, Jan 27, 2021 at 1:41 PM

To: leathern@google.com, Othar Hansson <othar@google.com>, Mark Risher <risher@google.com>, Rahul Roy-Chowdhury <rahulrc@google.com>, Sarah Hammond <shammond@google.com>, Lauren Palmer <laurenpalmer@google.com>, Gretchen Gelke <ggelke@google.com>, Arne de Booij <adebooij@google.com>, Tal Herman <talherman@google.com>, Guemmy Kim <guemmy@google.com>, Kalle Buschmann <kallebu@google.com>

Hi Everyone,

I'm Steve, a UXR in the PDPO working on Sin Rastro (Google-wide Incognito mode).

Attached is a deck that summarizes what we know about Incognito users, what they use it for, and some of the risks that we've identified over the course of the project.

It's worth noting that the Chrome team have done some excellent work in this space (as you might expect), and are putting together some very interesting plans in go/incognito2021 (slides 24 to 31 are probably the most relevant)

Please feel free to reach-out with any questions or concerns, I'm more than happy to help. Best.

Steve

TL:DR of the deck:

**Executive Summary** 

- Frequency of Use:
  - Incognito mode is used by % of Chrome users, and % use it at least once per week
- User Characteristics:
  - Weekly users are more likely to be
    - 47% of weekly users state, "I do everything I can to protect my privacy," implying that they are more privacy sensitive than non-users, and may be more open to other privacy controls
- Top use cases for Incognito mode:
- Risks to press cycles on Incognito mode:
  - Users overestimate the protections that Incognito provides and are unaware of the personalization and data collection that occurs when it is on
  - When considered together, Incognito mode appears to <u>negatively impact user sentiment</u> towards regular browsing
  - Educational moments intended to reassure and inform users of quality-of-life features (autofill & autocomplete) have led to negative reactions

Rob Leathern < leathern@google.com>

Wed, Jan 27, 2021 at 3:47 PM

Thanks,

Micha

[Quoted text hidden]

Steve Hamilton <sthamilton@google.com>

Fri, Feb 5, 2021 at 11:48 AM

To: Micha Segeritz <mseg@google.com>

Hi Micha,

You should have access to the summary deck now. The stats are self-reported from our Incognito survey. I agree, it does seem high given what Chrome report. I think it's a combination of self-report biases (mis-remembering/overestimating frequency of use) and the fact that Chrome use cookie age as the indicator of Incognito usage (this was their method last time I heard - they may have a new metric now). This may underestimate those who stay in Incognito forever and/or have very long Incognito sessions as they would be classified as signed-out users.

It does also seem to align with some of the work that Florian has done on Chrome - good discussion amongst them in this doc.

LMK if you want to chat more,

Steve

[Quoted text hidden]

## EXHIBIT 32

# Redacted Version of Document Sought to be Sealed

## Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 178 of 219 CONFIDENTIAL

1	UNITED STATES DISTRICT COURT
2	NORTHERN DISTRICT OF CALIFORNIA
3	SAN JOSE DIVISION
4	x
5	CHASOM BROWN, ET AL.
6	Plaintiffs
7	vs. CA No. 20-cv-03664-LHK
8	GOOGLE, LLC
9	Defendant
10	x
11	
12	CONFIDENTIAL
13	
14	ALL PARTICIPANTS APPEARING VIA ZOOM
15	
16	VIDEO DEPOSITION of MICHAEL KLEBER
17	Friday, January 14, 2022 - 9:03 a.m.
18	
19	
20	
21	
22	
23	Job no. 5027840
24	Reporter: Jill K. Ruggieri, RPR, RMR, FCRR, CRR
25	Pages 1 - 213
	Page 1

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 179 of 219 CONFIDENTIAL

1	APPEARANCES:
2	
3	Susman Godfrey LLP
4	Alexander P. Frawley, Esq.
5	1301 Avenue of the Americas, 32nd Floor
6	New York, New York 10019
7	212.729.2044
8	afrawley@susmangodfrey.com
9	- and -
10	Boies Schiller Flexner LLP
11	Beko Reblitz-Richardson, Esq.
12	Erika Nyborg-Burch, Esq.
13	44 Montgomery Street, 41st Floor
14	San Francisco, California 94104
15	415.293.6800
16	brichardson@bsfllp.com
17	enyborg-burch@bsfllp.com
18	Counsel for plaintiffs
19	
20	
21	
22	
23	
24	
25	
	Page 2

#### 

1	Quinn Emanuel Urquhart & Sullivan LLP
2	Andrew H. Schapiro, Esq.
3	Teuta Fani, Esq.
4	191 N. Wacker Drive, Suite 2700
5	Chicago, Illinois 60606
6	312.705.7400
7	andrewschapiro@quinnemanuel.com
8	teutafani@quinnemanuel.com
9	Counsel for defendant
10	
11	Simmons Hanly Conroy
12	An Truong, Esq.
13	112 Madison Avenue, 7th Floor
14	New York, New York 10016-7416
15	212.257.8482
16	atruong@simmonsfirm.com
17	Counsel for plaintiffs in the Calhoun v. Google
18	matter
19	
20	Also present: Toni Baker
21	
22	Videographer: Bob Giannini
23	
24	
25	
	Page 3

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 181 of 219 CONFIDENTIAL

1			I N D E X	
2				
3	WITNESS:			
4				
5	MICHAEL F	(LEB	ER	
6	Exam	nina	tion by Mr. Frawley 7	
7				
8			EXHIBITS	
9				
10	Exhibit	1	Email, Kleber to Nicolaou,	21
11			11/6/2018	
12	Exhibit	2	Email, McClelland to Kleber,	32
13			11/7/2018	
14	Exhibit	3	leads notes	42
15	Exhibit	4	Group chat, 8/22/2019	53
16	Exhibit	5	Google Keyword post by	5 5
17			Schuh, 8/22/2019	
18	Exhibit	6	Chat, Kaustubha and Kleber,	61
19			3/20/2020	
20	Exhibit	7	Group chat, 8/10/2018	65
21	Exhibit	8	Group chat, 9/11/2018	75
22	Exhibit	9	"Potential Sundar Questions"	95
23	Exhibit	10	Notes	115
24	Exhibit	11	Group chat, 9/12/2019	120
25	Exhibit	12	Email, Schuh to Rahim,	126
			Page	2 4

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 182 of 219 CONFIDENTIAL

1			9/13/2019		
2	Exhibit	13	"Assessing Chrome/Ads		131
3			Relationship" (Draft)		
4	Exhibit	14	"Assessing Chrome/Ads		135
5			Relationship"		
6	Exhibit	15	"K-API defaults in Chrome		140
7			Incognito"		
8	Exhibit	16	Privacy Sandbox initiative		155
9			overview presentation		
10	Exhibit	17	Group chat, 1/14/2021		171
11	Exhibit	18	Group chat, 9/5/2018		173
12	Exhibit	19	Group chat, 9/6/2018		183
13	Exhibit	20	Email, Sekhar to Kleber,		189
14			2/27/2019		
15	Exhibit	21	Email, Kleber to Jun,		190
16			2/27/2019		
17					
18					
19					
20					
21					
22					
23					
24					
25					
				Page	5

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 183 of 219 CONFIDENTIAL

1	PROCEEDINGS	
2		
3	THE VIDEOGRAPHER: Good morning.	
4	We are on the record. This is the videographer	
5	speaking, Bob Giannini, with court reporter,	
6	Jill Ruggieri, with Veritext Legal Solutions.	
7	Today's date is January 14,	09:03:01
8	2022, and the time is 9:03 a.m.	09:03:03
9	We are here to take the remote	09:03:09
10	video deposition of Michael Kleber in the	09:03:10
11	matter of Chasom Brown v. Google LLC.	09:03:13
12	Will counsel please introduce	09:03:18
13	themselves for the record.	09:03:20
14	MR. FRAWLEY: Good morning.	09:03:21
15	Alexander Frawley from Susman Godfrey for the	09:03:21
16	plaintiffs. With me are my colleagues, Beko	09:03:26
17	Reblitz-Richardson and Erika Nyborg-Burch, from	09:03:28
18	Boies Schiller Flexner.	09:03:33
19	MR. SCHAPIRO: Good morning.	09:03:34
20	I'm Andrew Schapiro for Google. I am joined by	09:03:35
21	my colleague, Teuta Fani, and also an attorney	09:03:40
22	from Google, Toni Baker.	09:03:45
23	MS. TRUONG: And good morning,	09:03:46
24	everyone. An Truong, Simmons Hanly Conroy, on	09:03:47
25	behalf of plaintiffs in the Calhoun v. Google	09:03:51
		Page 6

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 184 of 219 CONFIDENTIAL

1	matter, which is related to this case and	09:03:54
2	appearing pursuant to the court's cross-use	09:03:55
3	order. Thank you.	09:03:58
4	THE VIDEOGRAPHER: Okay. Thank	09:04:00
5	you.	09:04:00
6	Will the court reporter please	09:04:01
7	swear in the witness.	09:04:03
8		09:04:04
9	MICHAEL KLEBER, a witness having	09:04:04
10	been duly sworn, on oath deposes and says as	09:04:04
11	follows:	09:04:04
12		09:04:04
13	EXAMINATION	09:04:04
14	BY MR. FRAWLEY:	09:04:18
15	Q Good morning, Mr. Kleber.	09:04:21
16	A Good morning.	09:04:23
17	Q Can you please state your full name?	09:04:24
18	A Sure. My name is Michael Kleber.	09:04:27
19	Q And have you testified before?	09:04:32
20	A I have.	09:04:34
21	Q When have you testified before?	09:04:37
22	A A previous lawsuit against Google.	09:04:45
23	Q And was it for a deposition?	09:04:48
24	A Yes.	09:04:51
25	Q And did you also testify for trial?	09:04:53
		Page 7

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 185 of 219 CONFIDENTIAL

1	Q And if you know, what did he mean by	09:45:06
2	"blocking third-party cookies by default in	09:45:08
3	incognito mode"?	09:45:11
4	A That seems to refer to the way	09:45:17
5	incognito mode in Chrome actually works today.	09:45:20
6	Q Today, does all of Chrome block	09:45:26
7	third-party cookies by default, or is it just	09:45:30
8	incognito mode?	09:45:34
9	A Just incognito mode.	09:45:35
10	Q What's a third-party cookie?	09:45:37
11	A That's a good question.	09:45:44
12	Cookies are a form of data	09:45:52
13	storage that exists in web browsers where the	09:45:58
14	browser retains some data that came from the	09:46:05
15	server and then sends it back to that server	09:46:07
16	later.	09:46:10
17	Third-party cookies are	09:46:12
18	cookies the phrase "third-party cookies" is	09:46:15
19	a little ambiguous and not always used to mean	09:46:24
20	exactly the same thing. But probably the best	09:46:26
21	definition of it is cookies where the server	09:46:31
22	that sent or received back the data that I	09:46:34
23	referred to is not the same as the server that	09:46:39
24	a person browsing the web is in the middle of	09:46:47
25	visiting at the time that the communication	09:46:50
		Page 34

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 186 of 219 CONFIDENTIAL

1	happens.	09:46:52
2	Q And then how is that different from a	09:46:56
3	first-party cookie?	09:46:58
4	A First-party cookie is where the	09:47:00
5	server the domain that is sending or	09:47:03
6	receiving the cookie is the same as the one	09:47:07
7	that the person browsing is in the middle of	09:47:11
8	visiting.	09:47:18
9	Q And did you ever follow up with	09:47:22
10	Mr. McClelland about his consideration of the	09:47:23
11	idea that he mentioned?	09:47:26
12	A I don't recall. Sorry.	09:47:29
13	Q Do you know why Google chose not to	09:47:37
14	implement that idea for incognito mode?	09:47:39
15	MR. SCHAPIRO: Objection.	09:47:41
16	Foundation.	09:47:41
17	A As I think I said before, this was	09:47:49
18	not a proposal or a well-fleshed-out idea,	09:47:52
19	even. It was just a question of have we ever	09:47:59
20	thought about doing something like that.	09:48:01
21	So any question about whether to	09:48:07
22	actually pursue it or not would need to start	09:48:09
23	with an actual "it" that we might or might not	09:48:12
24	pursue, and I don't have any such particular	09:48:15
25	proposal to consider or even look at here.	09:48:18
	P	age 35

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 187 of 219 CONFIDENTIAL

1	page.	15:00:36
2	A Just a minute. Let me read through	15:00:39
3	to get context.	15:00:43
4	(The deponent read the	15:00:51
5	document.)	15:00:51
6	Yup, okay.	15:00:52
7	Q Do you see near the middle where you	
8	wrote: "Seems that the Ads blog post later	15:00:56
9	this month is going to say that we get back	15:00:58
10	greater than percent of advertiser CPD using	15:01:01
11	FLoC instead of third-party cookies for	15:01:05
12	in-market audience targeting"?	15:01:08
13	A Yes, I do.	15:01:11
14	Q And CPD refers to conversions per	15:01:13
15	dollar?	15:01:16
16	A That's correct.	15:01:19
17	Q And then right underneath, do you see	15:01:20
18	where you wrote: "That will make people sit up	15:01:22
19	and pay attention"?	15:01:24
20	A Yes, I do.	15:01:27
21	Q Why did you think that that would	15:01:29
22	make people sit up and pay attention?	15:01:32
23	A I think the context here is the	15:01:37
24	comment from Justin Schuh immediately above the	15:01:41
25	one that you read, in which Justin says, "I	15:01:46
	Pa	.ge 172

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 188 of 219 CONFIDENTIAL

1	feel like the industry is kinda sleeping on	15:01:49
2	FLoC." The FLoC API idea had been announced	15:01:53
3	sometime previously, but it had not gotten	15:02:05
4	substantial attention from the ad tech industry	15:02:10
5	at the point that this chat happened.	15:02:15
6	Q All right. I'm going to introduce	15:02:28
7	another exhibit.	15:02:29
8	(Exhibit 18 marked for	15:02:30
9	identification.)	15:02:30
10	BY MR. FRAWLEY:	15:02:30
11	Q I have to move the exhibit box thing,	15:03:04
12	which is fun but annoying.	15:03:06
13	I've introduced what's marked as	15:03:09
14	Exhibit 18. It's Bates No. GOOG-CABR-00801283.	15:03:11
15	A Okay. I have it.	15:03:20
16	Q Look at the second page.	15:03:39
17	A Just a minute. Let me read through	15:03:43
18	to get context.	15:03:45
19	(The deponent read the	15:03:57
20	document.)	15:03:57
21	Okay. Sure.	15:04:05
22	Q Okay.	15:04:09
23	Do you see where Mike West	15:04:09
24	wrote: "I see. I suppose that maps to things	15:04:11
25	like GA as well, which might be happy to accept	15:04:14
	Pa	ige 173

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 189 of 219 CONFIDENTIAL

1	a hashed variant of the first-party identifier	15:04:17
2	in order to do analytics"?	15:04:20
3	A Yes, I see that.	15:04:25
4	Q GA refers to Google Analytics,	15:04:26
5	correct?	15:04:28
6	A Yes, that's correct.	15:04:31
7	Q And then do you see where you	15:04:33
8	responded: "Right, great example, this is	15:04:34
9	exactly the way Google Analytics uses the	15:04:37
10	first-party cookie space today"?	15:04:39
11	Can you explain how Google	15:04:47
12	Analytics uses the first-party cookie space at	15:04:47
13	that point in time, November sorry,	15:04:53
14	September 2018?	15:04:55
15	MR. SCHAPIRO: Objection.	15:04:56
16	Foundation.	15:04:56
17	A Yes. So Google Analytics is a an	15:05:08
18	analytics service that lets website owners	15:05:10
19	understand some kind of aggregated information	15:05:24
20	about how people use their website. Obtaining	15:05:29
21	that information requires is built on Google	15:05:42
22	Analytics understanding not just one individual	15:05:50
23	page load at a time, but understanding like a	15:05:57
24	whole session a whole sequence of page view	15:06:01
25	kind of activity that might happen on one site	15:06:07
	Pa	ıge 174

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 190 of 219 CONFIDENTIAL

1	at a time.	15:06:13
2	And stitching together those	15:06:16
3	individual page views into an overall session	15:06:23
4	on one particular website requires having some	15:06:26
5	sort of pseudonymous identifier that is	15:06:33
6	associated with all of those individual page	15:06:37
7	loads.	15:06:42
8	So that the way in which	15:06:44
9	Google Analytics uses the first-party cookie	15:06:49
10	space as described in this chat is exactly to	15:06:54
11	store the pseudonymous identifier that is	15:06:58
12	associated with one browser's behavior on one	15:07:04
13	particular website.	15:07:08
14	Q And you mentioned just a moment ago	15:07:15
15	something about stitching together those	15:07:17
16	individual page views.	15:07:20
17	Does Google Analytics use	15:07:21
18	cookies to do that stitching?	15:07:23
19	A Yes.	15:07:31
20	Q And would those be first-party	15:07:32
21	cookies or third-party cookies?	15:07:33
22	A First-party cookies.	15:07:37
23	Q So if a user visits a website that	15:07:40
24	uses Google Analytics, like The New York Times,	15:07:43
25	for example, the New York sorry, the	15:07:47
	Pε	ıge 175

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 191 of 219 CONFIDENTIAL

1	analytics cookie will be first-party cookie?	15:07:50
2	A This is somewhat confusing, actually.	15:07:58
3	As yeah.	15:08:07
4	Yeah. First-party cookies on	15:08:20
5	The New York Times's website are cookies that	15:08:31
6	are available when you're on New York Times or	15:08:39
7	when your browser is communicating with New	15:08:45
8	York Times.	15:08:48
9	If your browser is communicating	15:08:52
10	with New York Times, then the cookies are sent	15:08:54
11	to the server as part of the request, or at	15:09:03
12	least they might be in some cases.	15:09:05
13	If you're looking at a webpage	15:09:09
14	on The New York Times website, then The New	15:09:14
15	York Times cookies can also be accessed by	15:09:20
16	or some New York Times cookies can also be	15:09:24
17	accessed by the JavaScript code that is part of	15:09:28
18	The New York Times's website.	15:09:34
19	All of those things that I just	15:09:41
20	described are first-party cookies. And that	15:09:44
21	type of first-party cookie that is accessed	15:09:53
22	through JavaScript that is built into The New	15:09:59
23	York Times's website is the way in which Google	15:10:03
24	Analytics uses first-party cookies to to get	15:10:08
25	a pseudonymous identifier associated with	15:10:18
	Ра	ige 176

# Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 192 of 219 CONFIDENTIAL

1	multiple different page views on New York	15:10:22
2	Times.	15:10:25
3	Q So do you recall earlier where you	15:10:30
4	said that today, Chrome, by default, blocks	15:10:31
5	third-party cookies within incognito?	15:10:35
6	A Yes.	15:10:39
7	Q So blocking third-party cookies by	15:10:41
8	default within incognito has no effect on the	15:10:43
9	Google Analytics processes you just described,	15:10:45
10	correct?	15:10:48
11	A I believe that's correct, yes.	15:10:52
12	Q Does blocking third-party cookies by	15:10:57
13	default have any effect on Google Analytics?	15:10:59
14	A I'm not sure.	15:11:07
15	Q And within an incognito session,	15:11:14
16	let's say on New York Times, the cookie is	15:11:17
17	being sent back and forth, does Chrome save	15:11:22
18	those cookies?	15:11:25
19	MR. SCHAPIRO: Objection to the	15:11:26
20	form of the question. Vague. Ambiguous.	15:11:26
21	A I'm sorry, could you repeat the	15:11:30
22	question?	15:11:32
23	Q Yes.	15:11:32
24	So I just want to go back to	15:11:33
25	we were talking about The New York Times,	15:11:37
	Pε	age 177

### EXHIBIT 34

# Redacted Version of Document Sought to be Sealed

#### Message

From: Justin Schuh [jschuh@google.com]

**Sent**: 8/30/2016 7:22:59 PM

To: Mike West [mkwst@google.com]

CC: Jochen Eisinger [eisinger@google.com]; Ojan Vafai [ojan@google.com]; Dominic Battre [battre@google.com]; Joel

Weinberger [jww@google.com]; Artur Janc [aaj@google.com]; chrome-security-owp [chrome-security-

owp@google.com]; Stephen Röttger [sroettger@google.com]

**Subject**: Re: HEIST is a good reason to revisit third-party cookie handling?

This is similar to where mixed-content blocking was several years ago. Microsoft had a very dodgy implementation, but at least they were doing something. And their work gave us cover when we started attacking the problem, and iterated on increasingly better blocking.

Eventually, other browsers started tagging along, and some sucker even got duped into making a spec out of it. 🗑

On Tue, Aug 30, 2016 at 12:04 PM, Mike West < <a href="mailto:mkwst@google.com">mkwst@google.com</a>> wrote: On Tue, Aug 30, 2016 at 8:40 PM, Jochen Eisinger < <a href="mailto:eisinger@google.com">eisinger@google.com</a>> wrote: Safari moving the needle? o O

Perception-wise, totally. And their default is stricter than ours.

What they call third-party cookie blocking is not really blocking. I'd be fine with making our default to do what Safari does (only block writing if there are no pre-existing cookies), but keep our "block 3rd party cookies" setting as is (actually block stuff).

SGTM as a first step, but, you know, let's break all the things.

On Tue, Aug 30, 2016 at 6:23 PM Mike West < mkwst@google.com > wrote: +ojan, who I thought was added earlier in the thread, but apparently wasn't.

On Tue, Aug 30, 2016 at 5:59 PM, Justin Schuh < ischuh@google.com wrote:

I totally appreciate the compatibility concerns, but Safari has been moving the needle here for several years now. So, I think we should start pushing too.

I don't know what to do about fingerprinting. Personally, I'm dubious it's a problem that we could reasonably solve even if were to start all over with the Web. And I feel it's intractable with the Web as it is today. However, I also view that as a very different problem from a security perspective.

My big security concern is the ambient permission leakage that comes from allowing third-party cookies. So, I think there's a big value in solving that problem on its own, independent of user tracking (via cookies or fingerprinting) as a privacy issue.

I agree. I suspect Dominic/privacy agrees too.

-mike

On Tue, Aug 30, 2016 at 3:17 AM, Mike West < <a href="mkwst@google.com">mkwst@google.com</a>> wrote: We didn't do things like <a href="https://docs.google.com/document/d/1tFLIeYmE8MR-m79MLSmJ">https://docs.google.com/document/d/1tFLIeYmE8MR-m79MLSmJ</a> mHDHNQLn7yYo9aDBslKIVs/edit

CONFIDENTIAL GOOG-BRWN-00397243

or <a href="https://docs.google.com/document/d/1hK4nB3lZGCtII">https://docs.google.com/document/d/1hK4nB3lZGCtII</a> r tIPg4xPMmDr6Ahh9lL5veAccsrg/edit in the past for the two reasons that Jochen notes: fingerprinting, and identity providers.

Identity providers are solvable in some way via better UI for users or intelligent decisions the browser makes about when to allow cookies and when to block them ("Hey, you've been to this site at the top-level 100 times in the last week. Maybe you like it?").

Fingerprinting is harder. There's nothing we can technically do to prevent it, and we haven't been successful at creating a technical/regulatory framework in which to successfully ostracize it.

That said, based on some comments they've made in WebAppSec, Safari seems to be doing things to tighten their behavior in this area. I think it's something we should think about again. +battre from Privacy.

-mike

-mike

On Mon, Aug 22, 2016 at 1:54 PM, Jochen Eisinger < <u>eisinger@google.com</u>> wrote: The other big use case are ID providers, i.e., you'll need to whitelist <u>google.com</u> to use <u>teams.googleplex.com</u>

In order to be able to

We also need a better story for fingerprinting, as this will just push (non-IBA) ad networks into using fingerprinting instead of cookies.

On Tue, Aug 9, 2016 at 3:24 AM Joe! Weinberger < jww@google.com > wrote: My ignorance is astounding, but I assume third-party cookies are almost exclusively used by ad folks these days, yes? If so, should we bring Ojan and the Magnolia folks in on this?

On Fri, Aug 5, 2016 at 11:27 AM Artur Janc <a in a square of squar

On Fri, Aug 5, 2016 at 11:18 AM, Justin Schuh < jschuh@google.com > wrote:

Here's the Blackhat presentation:

https://www.blackhat.com/docs/us-16/materials/us-16-VanGoethem-HEIST-HTTP-Encrypted-Information-Can-Be-Stolen-Through-TCP-Windows-wp.pdf

The tl;dr is that third-party cookie blocking would prevent HEIST from being able to steal sensitive content. I realize that this is subject is fraught with peril, but maybe it's time to take another crack at a

You received this message because you are subscribed to the Google Groups "chrome-security-owp" group.

To unsubscribe from this group and stop receiving emails from it, send an email to <u>chrome-security-owp+unsubscribe@google.com</u>.

To post to this group, send email to <a href="mailto:chrome-security-owp@google.com">chrome-security-owp@google.com</a>.

To view this discussion on the web visit <a href="https://groups.google.com/a/google.com/d/msgid/chrome-">https://groups.google.com/a/google.com/d/msgid/chrome-</a>

CONFIDENTIAL GOOG-BRWN-00397244

security-

owp/CAObUUC j2SkZnYxLt5dw4vdRLxuPTZuMdM0s8ucdFkWrj7cRSw%40mail.gmail.com.

--

You received this message because you are subscribed to the Google Groups "chrome-security-owp" group.

To unsubscribe from this group and stop receiving emails from it, send an email to <u>chrome-security-owp+unsubscribe@google.com</u>.

To post to this group, send email to <a href="mailto:chrome-security-owp@google.com">chrome-security-owp@google.com</a>.

To view this discussion on the web visit <a href="https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAPYVjqq%2BZRCAgxxwjNRSyeZei-9Mg9x-iWphjznmnNEV3WT-tw%40mail.gmail.com">https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAPYVjqq%2BZRCAgxxwjNRSyeZei-9Mg9x-iWphjznmnNEV3WT-tw%40mail.gmail.com</a>.

\_\_

You received this message because you are subscribed to the Google Groups "chrome-security-owp" group.

To unsubscribe from this group and stop receiving emails from it, send an email to <u>chrome-security-owp+unsubscribe@google.com</u>.

To post to this group, send email to <a href="mailto:chrome-security-owp@google.com">chrome-security-owp@google.com</a>.

To view this discussion on the web visit <a href="https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAHQV2K%3De7M6ZrZ3vy4R-">https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAHQV2K%3De7M6ZrZ3vy4R-</a>

FJts950M gJVTB4c70 e1fm%2B4PC%3DrA%40mail.gmail.com.

--

You received this message because you are subscribed to the Google Groups "chrome-security-owp" group.

To unsubscribe from this group and stop receiving emails from it, send an email to <u>chrome-security-owp+unsubscribe@google.com</u>.

To post to this group, send email to chrome-security-owp@google.com.

To view this discussion on the web visit <a href="https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAKXHy%3DeVyjK5S3ix-unmMFd-2SZyfiL0oh17KHeOV2yzQ4-xfw%40mail.gmail.com">https://groups.google.com/a/google.com/d/msgid/chrome-security-owp/CAKXHy%3DeVyjK5S3ix-unmMFd-2SZyfiL0oh17KHeOV2yzQ4-xfw%40mail.gmail.com</a>.

CONFIDENTIAL GOOG-BRWN-00397245

### EXHIBIT 36

# Redacted Version of Document Sought to be Sealed



### **Google Analytics: Starting Conversation**

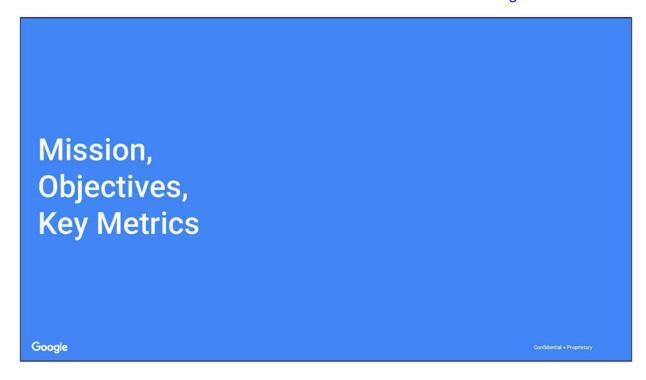
Last updated: November - 2020

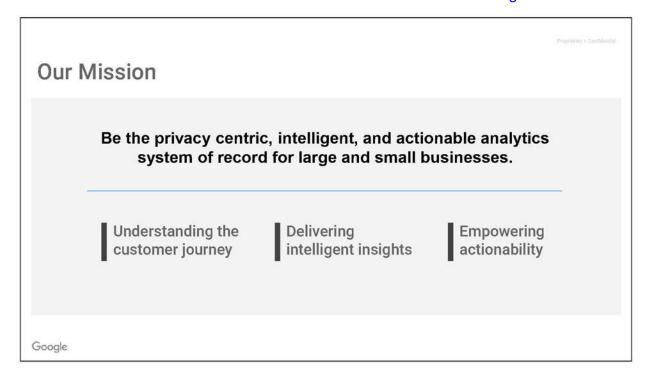
Confidential + Proprietary

### Agenda

- 1. Mission, Objectives, Key Metrics
- 2. Product Segmentation, Customers, Personas, User Clusters
- 3. Understanding the Product
- 4. The Industry Landscape
- 5. Pricing & Commercialization
- 6. Gold History
- 7. Architecture (Eng deep-dive to follow!)

Google Confidential + Proprietary





Proprietary + Confidential

### Value to Google

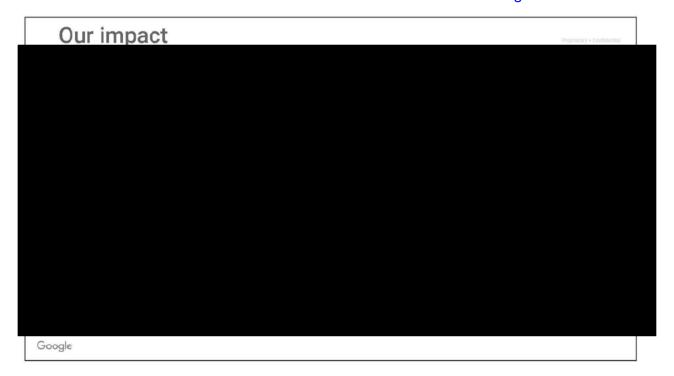


Protect and grow Google media spend
Influence strategic budgets and grow Google's digital
share via better insights and integrations for
customers.



- We have a paid business because it is necessary to capture & influence
   <u>Google's largest & most sophisticated customers</u> (some customers will not adopt our product without a price tag, sales, services, SLAs, and enterprise capabilities)
- Our value also includes being: a key catalyst in <u>driving better overall user</u> experiences for the internet.

Google





# EXHIBIT 37 Redacted in its Entirety

# EXHIBIT 38 Redacted in its Entirety

# EXHIBIT 39 Redacted in its Entirety

# EXHIBIT 40 Redacted in its Entirety

# EXHIBIT 41 Redacted in its Entirety

# EXHIBIT 42 Redacted in its Entirety

### EXHIBIT 43

# Unredacted Version of Document Sought to be Sealed

Case 4:20-cv-03664-YGR  $\,$  Document 409-4  $\,$  Filed 02/17/22  $\,$  Page 212 of 219  $\,$ 

#### CONFIDENTIAL

#### UNITED STATES DISTRICT COURT 1 NORTHERN DISTRICT OF CALIFORNIA 2 SAN JOSE DIVISION 3 CHASOM BROWN, WILLIAM BYATT, JEREMY DAVIS, CHRISTOPHER 4 CASTILLO, and MONIQUE TRUJILLO, individually and on behalf of all similarly 5 situated,

Plaintiffs,

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

GOOGLE LLC,

v.

Defendant.

Case No. 5:20-cv-03664-LHK

### DEFENDANT GOOGLE LLC'S OBJECTIONS AND RESPONSES TO PLAINTIFFS' 8TH SET OF INTERROGATORIES (NOS. 30-33)

Pursuant to Federal Rule of Civil Procedure 33, Defendant Google LLC ("Google") hereby responds and objects to Plaintiffs' Interrogatories, Set 8 (Nos. 30-33). These objections and responses are made solely for the purpose of and in relation to this action. In addition, the objections and responses set forth in this document are based on Google's knowledge, investigations, and analysis to date. As discovery proceeds, Google may become aware of additional facts or evidence and its analysis of the case may change. Google reserves all rights to supplement and amend its objections and responses accordingly.

### **GENERAL OBJECTIONS**

Google objects to Plaintiffs' definition of "GOOGLE," "YOU," and "YOUR" as 1. encompassing "any of its directors, officers, consultants, agents, representatives, predecessors in interest, subsidiaries, assignees, licensees, employees, attorneys and any other persons acting on GOOGLE LLC'S behalf, including contractors," as well as "purporting to act on" Google's behalf. Google further objects to these definitions to the extent that it seeks to require Google to produce or otherwise analyze any document or other information that is not within the possession, custody, or

Case No. 5:20-cv-03664-LHK

control of Google. Google further objects to these definitions to the extent that it purports to impute knowledge of unspecified or unknown parties or persons to Google. Google further objects to these definitions as overly broad, vague, and ambiguous to the extent they purport to include entities other than Google, which is the only named defendant in the present action. Google further objects to these definitions and instruction to the extent that they include Google's attorneys and, therefore, cause interrogatories using "Google" to improperly seek information protected by the attorney-client privilege, the work product doctrine, the common interest privilege and/or any other applicable privileges or immunities.

- 2. Google objects to Plaintiffs' definitions of "ALL," "INCLUDE," "INCLUDING," "CONCERNING," and "RELATING TO" to the extent that they propose to alter the plain meaning or scope of any specific interrogatory and to the extent that such alteration renders the interrogatory vague, ambiguous, and overbroad.
- 3. Google objects to Plaintiffs' definition of INSTANCES as vague, ambiguous and overly broad.
- 4. Google objects to Plaintiffs' Definitions, Instructions, and interrogatories to the extent they seek information and/or records that are not reasonably accessible and whose inclusion is not proportional to the needs of the case.
- 5. Google objects to the interrogatories to the extent that they seek information shielded from disclosure by the attorney-client privilege, the work-product doctrine, the settlement privilege and/or any other applicable privilege or protection from discovery.
- 6. Google objects to Plaintiffs' Definitions, Instructions, and interrogatories to the extent they conflict with or encompass information and/or records falling outside the scope of discovery under the Federal Rules of Civil Procedure, the local rules of the Northern District of California, or any discovery orders governing this case.

### Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 214 of 219

CONFIDENTIAL									
7.	Googl	e's responses to these interrogatories are hereby made without waiving or							
intending to waive, but rather, to the contrary, by preserving and intending to preserve:									
	a.	All questions as to the competence, relevance, proportionality, materiality,							
		and admissibility as evidence for any purpose of the information or							
		documents, or the subject matter thereof, in any aspect of this action or any							
		other court action or judicial or administrative proceeding or investigation;							
	b.	The right to object on any ground to the use of any such information or							
		documents, or the subject matter thereof, in any aspect of this action or any							
		other court action or judicial or administrative proceeding or investigation;							
	c.	The right to object at any time in connection with any further response to							
		these or any other interrogatories; and							
	d.	The right at any time to supplement its responses.							
8.	Googl	e anticipates that future discovery, independent investigation, or analysis will							
supply additi	onal fac	ts and add meaning to known facts, as well as establish new factual conclusions							

supply additional facts and add meaning to known facts, as well as establish new factual conclusions and legal contentions, all of which may lead to additions to, changes in, and variations from the responses set forth herein. Google reserves the right to modify, supplement, withdraw, or otherwise alter its responses to these interrogatories in accordance with the Federal Rules of Civil Procedure, the local rules of the Northern District of California, or any discovery orders governing this case.

### OBJECTIONS AND RESPONSES TO SPECIFIC INTERROGATORIES

Subject to the foregoing objections, Google objects and responds to Plaintiffs' interrogatories as follows:

Case No. 5:20-cy-03664-LHI

#### CONFIDENTIAL

### **INTERROGATORY NO. 30:**

Please explain all differences regarding how browsing data is sent from users' devices to Google when (1) a user visits a website that uses Google Ad Manager but not Google AdSense compared with (2) a user visits a website that uses Google AdSense but not Google Ad Manager.

### **RESPONSE TO INTERROGATORY NO. 30:**

Google incorporates its General Objections as if set forth fully herein. Google further objects to this interrogatory as overbroad and unduly burdensome on the grounds that Google AdSense is not tied to Plaintiff's class definition. *See* Dkt. 136-1 (Second Amended Complaint ("SAC"))¶192. Google further objects to this interrogatory as vague and ambiguous as to the meaning of the terms "browsing data" and "sent from users' devices to Google." Google will assume for purposes of its response that "browsing data...sent from users' devices to Google" means data generated when users visit third-party websites that use Google Ad Manager or Google AdSense while not logged into their Google Account. Google further objects to this interrogatory to the extent it seeks information related to non-Chrome browsers, which may have unique browser features that impact data collection by Google Ad Manager and Google AdSense. Google further objects to this interrogatory as overbroad and unduly burdensome because it seeks a description of "all" differences between data received by websites using Ad Manager or AdSense.

Subject to and without waiving the foregoing objections, Google responds as follows:

Google Ad Manager will not receive data related to a user's visit to a specific website unless Ad Manager scripts have been installed in the website's HTML code. Similarly, Google AdSense will not receive data related to a user's visit to a specific website unless AdSense scripts have been installed in the website's HTML code. The Ad Manager scripts are different from the AdSense scripts, but each may be viewed by any Chrome user by visiting the webpage using Google Ad Manager (or AdSense) and clicking on "View," "Developer," "Developer Tools," "Sources." The

### Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 216 of 219

#### CONFIDENTIAL

data sent to Google Ad Manager and Google AdSense depends on the functionality defined in the
respective scripts. The data sent to Google Ad Manager will differ from the data sent to Google
AdSense in a number of respects, due to differences between the two products and the respective
APIs they provide to publishers, which are described in publicly-available documentation. See, e.g.,
https://developers.google.com/publisher-tag/guides/get-started;
https://support.google.com/adsense/answer/9274634.

The data sent to Google Ad Manager or Google AdSense also depends on a number of other factors. When a user (in any browser) visits a website that uses Google Ad Manager or AdSense, Google Ad Manager or AdSense may receive: (1) cookies that specific Google domains previously set on the user's browser; (2) the HTTP request sent by the user's browser, including the hostname, browser type, and language, and depending on the browser used, Java support, Flash support, and screen resolution; (3) the URL of the website making the ad request to Google Ad Manager or AdSense, and/or the referrer URL; (4) the IP address assigned to the device on which the browser is running; (5) the request for an ad to be served on a non-Google website and the ad slot to be filled; (6) event data such as impressions or clicks; and (7) if the user is in Chrome and a mode other than Incognito, the browser's X-Client-Data Header. The X-Client-Data Header may also be empty even when the browser is not in Incognito mode, including: (i) a new browser instance (ii) the browser has not been used for 30 days or more; (iii) the Chrome server sends too many variation IDs to the Chrome browser thereby causing the Chrome browser to delete the header to keep it from becoming too large; and (iv) a firewall prevents Chrome from receiving the variation IDs that are used to populate the X-Client-Data Header.

Whether Google in fact receives these categories of data depends on numerous factors, including (1) features and settings enabled by the user in Chrome or in the user's Google Account settings and (2) use of third-party software by the user. For example, Chrome's cookie settings,

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

### Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 217 of 219

#### CONFIDENTIAL

which are accessible via a drop-down menu or by navigating to chrome://settings/cookies, include
an option to "block all cookies." When the user enables this feature, Chrome prevents websites
Google Ad Manager and AdSense from setting or receiving any cookies. If all cookies are blocked
in this manner, the Chrome browser will not send any cookies to Google Ad Manager or AdSense
Chrome's settings also include an option to "block third-party cookies." When the user enables this
feature, Chrome does not set or transmit to Google Ad Manager or AdSense any third-party cookies,
including advertising cookies. Similarly, enabling "clear cookies and site data when you close all
windows" in Chrome settings means that cookies do not persist across browsing sessions and
Google Ad Manager and AdSense will not receive any cookies set in a prior session.

As another example, Chrome's JavaScript settings, which are accessible via a drop-down menu or by navigating to chrome://settings/content/javascript, include the following option: "Don't allow sites to use JavaScript." When a user selects "Don't allow sites to use JavaScript," Chrome prevents websites from using JavaScript, including Google Ad Manager and AdSense tags based on JavaScript. As a result, if JavaScript is disabled in this manner, the Google Ad Manager or AdSense JavaScript tag will not be able to send information to Google Ad Manager or AdSense when a Chrome user visits a website that uses Google Ad Manager or AdSense.

There are also multiple ad-blocking extensions available on the Chrome Web Store that, when installed, can be configured to block Chrome from sending ad requests. Popular examples of those extensions are AdBlock and Adblock Plus. When installed by a user, these ad-blocking extensions may, depending on their configuration, prevent Chrome from sending ad requests to Google Ad Manager or AdSense. There are also multiple standalone (not browser extension/plug-in) ad blocker programs that are designed to provide the same ad-blocking functionality. Popular examples of those programs are AdGuard and AdLock. When installed by a user, these ad-blocking programs may, depending on their configuration, prevent Chrome from sending any ad requests to

### Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 218 of 219

### CONFIDENTIAL

Google Ad Manager or AdSense, thus preventing Google Ad Manager or AdSense from receiving any of the information described above.

If Chrome is used in Incognito mode, Chrome will not send the X-Client-Data Header to doubleclick.com or any other domain used by Google Ad Manager or AdSense. Furthermore, when a user activates Incognito mode, Chrome will create a new cookie jar that only stores first-party cookies and third-party cookies if not blocked (the default setting is for third-party cookies to be blocked in Incognito mode) for the duration of that Incognito session, and those cookies are deleted when the Incognito session ends. Because Chrome creates a new cookie jar for the Incognito session, Google Ad Manager and AdSense will not receive any cookie values set in a prior session. Similar to Incognito mode, when a user activates Guest mode, Chrome will create a new cookie jar that only stores cookies for the duration of that Guest mode session, and those cookies are deleted when the Guest mode session ends. Because Chrome creates a new cookie jar for the Guest mode session, Google Ad Manager and AdSense will not receive any cookies set in a prior session.

There are also a number of third-party privacy programs and features that users can employ that affect whether Google Ad Manager or AdSense receives the data at issue, including proxy servers and VPNs, firewalls, ad blockers, and opt-out features. For example, if a Chrome user or their network administrator employs a proxy server or VPN (Virtual Private Network) that masks the sending device's IP address, then Google Ad Manager or AdSense would not receive the user's real IP address. Instead, Google Ad Manager or AdSense would receive only the IP address assigned by the VPN or proxy server. And if a Chrome user or their network administrator employs a firewall that is configured to allow traffic only to specific domains (not including domains associated with Google Ad Manager or AdSense), or to prevent traffic to specific domains (including domains associated with Google Ad Manager or AdSense), then any transmissions that the Chrome browser attempts to send to Google Ad Manager or AdSense will be blocked by the firewall. Firewalls can

### Case 4:20-cv-03664-YGR Document 409-4 Filed 02/17/22 Page 219 of 219

### CONFIDENTIAL

also prevent	Chrome fi	rom receivi	ng the varia	ation IDs tha	t are used	to populate t	he X-Client	-Data
Header								

When a user (in any browser) visits a website that uses Google AdSense, Google AdSense may receive many of the same types of data described above for Google Ad Manager (subject to the same factors described above). However, Google AdSense will not receive certain items of data that are only relevant to Google Ad Manager. For example, as described in publicly available documentation, Google Ad Manager allows publishers to set a publisher-provided identifier (PPID). See <a href="https://support.google.com/admanager/answer/2880055">https://support.google.com/admanager/answer/2880055</a>. Google AdSense does not provide this feature, so when a user visits a website that uses Google AdSense, the browser would not send a PPID value to Google AdSense.

### **INTERROGATORY NO. 31:**

Please explain the basis for Google's determination that "false positives" for Chrome Incognito browsing detection in log-based analyses "range from (GOOG-BRWN-00204687), including by identifying documents and individuals tied to this determination.

### **RESPONSE TO INTERROGATORY NO. 31:**

Google incorporates its General Objections as if set forth fully herein. Google further objects to this interrogatory to the extent it mischaracterizes a draft document prepared by individual Google employees as "Google's determinations" regarding "false positives' for Chrome Incognito browsing detection." Google further objects to this interrogatory as vague and ambiguous as to the meaning of the terms "Chrome Incognito browsing detection," "log-based analyses," and "tied to this determination."

Subject to and without waiving the foregoing objections, Google responds as follows:

The estimated "false positives to identify Chrome traffic" ranging from "referenced at GOOG-BRWN-00204684 at -87 was based on differences observed between certain statistics collected from multiple independent sources, including data available to Chrome engineers and data

Case No. 5:20-cy-03664-LHK